THE PLACE OF STORYTELLING IN ẸDO LANGUAGE DOCUMENTATION AND PRESERVATION

BY

IGBINEDION PRECIOUS EHIGIAMUSOE (Miss)
ART2000541

DEPARTMENT OF LINGUISTICS STUDIES

FACULTY OF ARTS,

UNIVERSITY OF BENIN

BENIN CITY

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A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF LINGUISTICS STUDIES, FACULTY OF ARTS, UNIVERSITY OF BENIN, BENIN CITY. IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ART (B.A) IN LINGUISTICS STUDIES

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APPROVAL PAGE

This is to certify that this project was carried out by **IGBINEDION PRECIOUS EHIGIAMUSOE** in the Department of Linguistics Studies under my supervision.

_____

DR. MRS. O.V EVBAYIRO

(Project Supervisor)

Date_____

Confirmed by

_____

PROF. M. S. AGBO

(Head of Department)

Date:_____

PLAGIARISM CERTIFICATION

I, **IGBINEDION PRECIOUS EHIGIAMUSOE** with matriculation number **ART2000541** declare that this work titled **"THE PLACE OF STORYTELLING IN EDO LANGUAGE DOCUMENTATION AND PRESERVATION"** has successfully passed the anti-plagiarism test and so does not violate any copyright regulations.

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DEDICATION

I dedicate this work to God Almighty, whose grace, wisdom, and strength have guided me every step of the way. To my mother, Mrs. Rita Egharevba for her unconditional love, sacrifices, and unwavering support—1 am forever grateful. To Mr. Kelvin Osamudiamen for his encouragement, support and belief in me thank you for always being there. To my siblings you guys are the best!

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ABSTRACT

This study aimed to investigate the place of storytelling in Ẹdo language documentation and preservation by assessing the significance of these storytellings in the language, examining the role of these stories in the maintenance and revitalization of the language in contemporary society, and to explore the influence of modern technologies and media platforms on the practice of storytelling and language documentation in the language. The research relied on data gotten from primary source. Interviews and storytelling sessions were conducted with elders, storytellers, and community members in Ẹdo-speaking areas in Benin City, specifically around Ovia North-East Local Government Area. The stories were first written in Ẹdo before been translated to English. The theoretical framework used for the analysis of this research was the Ethnography of Communication (SPEAKING MODEL) by Hymes (1964). The findings revealed that storytelling plays a significant role in documenting the Ẹdo language. Through oral traditions, stories serve as a repository for linguistic and cultural knowledge, preserving key expressions, idioms, and customs. It allows the language to be passed down from one generation to the next, ensuring its continuity. Storytelling also contributes to the maintenance and revitalization of the Ẹdo language in contemporary society. It helps keep the language alive by providing an engaging way to learn and practice it, especially in a time when modern languages and technologies are often prioritized.

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Obesity is a pressing health concern, disproportionately affects women of childbearing age, underscoring the need for targeted interventions that translate awareness into actionable strategies for prevention and empowerment. Obesity is a complex multifactorial disease that accumulated excess body fat that leads to negative effects on health (WHO, 2023). Obesity is a intricate and multifaceted health condition characterized by excessive body fat accumulation, which has detrimental consequences on overall well-being(Ajayi et al., 2021). The rising prevalence of obesity has spawned a global epidemic, exhibiting unchecked growth with no imminent signs of decline (Xihua Lin *et al.,* 2022). Assessment is the process of evaluating and measuring the knowledge and practices related to obesity and its prevention, using tools like surveys, interviews, or focus group discussions. Knowledge refers to the understanding and awareness of facts, concepts, and principles related to obesity, its causes, consequences, and prevention strategies. Prevention of obesity involves proactive measures, strategies, and initiatives aimed at reducing the likelihood of obesity and its associated health issues, through a combination of lifestyle changes, behavioral modifications, and supportive environments. Reproductive-aged women encompasses females between the ages of 18 and 45 years, who are capable of becoming pregnant and are in their childbearing years. Although BMI is widely used to assess obesity severity in children, its usefulness in informing personalized clinical decisions is restricted (Faye Southcombe *et al.,* 2022).

The diagnosis of overweight and obesity typically involves measuring an individual's weight and height to calculate their body mass index (BMI). While BMI serves as an indirect indicator of

body fat, additional assessment so such as waist circumference measurements, can provide further clarity in diagnosing obesity. (WHO, 2024). Obesity has evolved into a global health crisis, affecting people of all ages worldwide. The World Health Organization defines obesity as an abnormal fat accumulation that poses health risks, typically measured by a Body Mass Index (BMI) of 30 kg/m² or higher. Since 1975, global obesity rates have nearly tripled, influenced by factors like genetics, behavior, environment, and socioeconomic status. Obesity among women of reproductive age has become a critical public health concern due to its growing prevalence and associated health risks. Globally, the obesity rate in this group continues to rise, driven by factors such as urbanization, unhealthy diets, sedentary lifestyles, and limited access to preventive care. Obesity in women of reproductive age not only affects their general health but also poses significant risks to fertility, pregnancy outcomes, and offspring health, including conditions such as gestational diabetes, hypertension, and long-term metabolic issues in children. (EunSeok, Cha *et al.,* 2024). In Nigeria, the increasing burden of obesity reflects a shift toward urban lifestyles characterized by reduced physical activity and increased consumption of processed foods. Studies show that lack of awareness about the risks of obesity and ineffective implementation of preventive strategies contribute to its prevalence. Women in Egor Local Government, Benin-City, are particularly vulnerable due to sociocultural and economic factors that limit their access to knowledge and resources for maintaining a healthy weight. (BMC women's Health, 2021). Efforts to combat obesity among this group require targeted health education, promotion of healthy lifestyle choices, and support systems at the community and healthcare levels. Research is essential to assess the knowledge gaps, attitudes, and practices regarding obesity prevention and to inform policies and interventions aimed at improving the health outcomes of women of reproductive age. (BMC Nutrition, 2021). Unhealthy diets, sedentary lifestyles, and lack of physical activity contribute significantly to obesity. Furthermore,

limited knowledge about obesity prevention, particularly among populations with lower health literacy, exacerbates the issue. Obesity increases the risk of various comorbidities, including cardiovascular diseases, diabetes, and certain cancers, ultimately reducing life expectancy and increasing healthcare costs. (Xihua Lin et al., 2022).

Preventing obesity requires a multifaceted approach, involving individual and societal efforts to promote health education, healthy eating, physical activity, and supportive environments. Knowledge is crucial in obesity prevention, enabling individuals to make informed lifestyle choices. This study aims to assess knowledge gaps regarding obesity prevention among specific populations, informing strategies to promote healthier behaviors and reduce obesity rates.

1.2 Statement of the Problem

Obesity has reached alarming levels globally, affecting people of all ages. Obesity has emerged as a significant public health challenge worldwide, affecting various demographic groups, especially women of reproductive age. The prevalence of obesity has been on the rise, correlating with adverse health outcomes such as diabetes, cardiovascular diseases, and reproductive health issues (World Health Organization, 2023). Women aged 18-40 years are particularly vulnerable, as this demographic not only faces the pressures of societal beauty standards but also experiences physiological changes that can affect body weight and health (Shaw et al., 2023). Despite increasing awareness about the risks and impacts of obesity, there is a concerning knowledge gap regarding effective prevention strategies among women in reproductive age. Research indicates that educational interventions can significantly improve knowledge and awareness about obesity management and prevention (Johnson et al., 2022).

However, in many local contexts, including selected local governments, there is limited data on the current level of knowledge regarding obesity among women of this age group.

Understanding these dynamics is crucial for developing targeted interventions and public health strategies.Furthermore, the stigma associated with obesity can hinder open discussions about weight management and healthy lifestyle choices among women (Smith & Chang, 2024). Consequently, the lack of culturally relevant prevention programs tailored to this demographic may perpetuate the cycle of obesity and its associated health risks.The issue extends beyond obesity's physical and emotional toll to inadequate knowledge and implementation of preventive measures. Limited understanding of healthy habits, socioeconomic factors, cultural beliefs, and misinformation hinder effective prevention. Obesity among individuals of reproductive age (18-40 years) has become a pressing concern, posing significant health risks to themselves and their families. This age group is particularly susceptible due to factors like sedentary lifestyles, unhealthy diets, and inadequate physical activity. Hormonal changes, pregnancy, and postpartum weight retention also contribute to weight gain (EunSeok, Cha et al., 2024).

The consequences of obesity during reproductive years are severe, including reduced fertility, pregnancy complications, and increased risk of chronic diseases like diabetes, hypertension, and cardiovascular disorders. Despite these risks, many individuals lack knowledge about obesity causes and prevention strategies. This research aims to assess the current level of knowledge about obesity and its prevention among women of reproductive age within selected local government areas, examining the effectiveness of existing educational programs and identifying gaps. By doing so, this study will contribute to the formulation of comprehensive public health strategies that will empower women to make informed decisions regarding their health and well-being (Williams et al., 2023).

1.2 Aim of the study

The aim of this study is to assess the knowledge and prevention of obesity among women of reproductive age (18-40 years) in selected local governments. However, the specific objectives of this study include to:

1. Assess the level of knowledge regarding obesity and its health implications among women of reproductive age (18-40 years) in selected local governments.
2. Assess the extent of preventive measures against obesity among women of reproductive age in the selected local governments.
3. Identify factors influencing the preventive practices related to obesity among women of reproductive age in the selected local governments.

1.5 Research questions

1. What is the level of knowledge regarding obesity and its health implications among women of reproductive age (18-40 years) in selected local governments?
2. what is the extent of preventive measures against obesity among women of reproductive age in the selected local governments.
3. What factors influence the preventive practices related to obesity among women of reproductive age (18-40 years) in the selected local governments?

1.6 Hypothesis

H_o: There is no significant difference in the level of knowledge regarding obesity and its health implications among women of reproductive age (18-40 years) in selected local governments.

1.7 Significance of the Study

This research on knowledge and prevention of obesity among women of reproductive age in Egor Local Government, Benin-City, addresses a critical public health issue with far-reaching implications. Its significance extends to various stakeholders, including individuals, nursing

professionals, healthcare administrators, governments, and society at large, both nationally and globally.

For Reproductive-Aged Women

This study provides vital information on obesity causes and health risks, empowering women to make informed decisions about their health. By understanding the importance of balanced nutrition, regular physical activity, and stress management, women can adopt healthier behaviors, improving their quality of life and reducing the risk of complications like infertility, gestational diabetes, and cardiovascular diseases.

For Nursing Practice

The study's findings will equip nurses with the knowledge to provide holistic care to reproductive-aged women. Nurses can offer tailored counseling on obesity prevention, support patients in adopting sustainable lifestyle changes, and advocate for improved healthcare resources and policies addressing obesity management and prevention.

For Nursing Research

This study contributes significantly to nursing research, highlighting the often-overlooked demographic of reproductive-aged women. The data collected will help identify knowledge deficits and barriers specific to this population, providing a foundation for future research and encouraging further exploration of socio-cultural, economic, and environmental factors influencing obesity.

For Nursing Administration

The study's insights will inform the creation of policies and programs prioritizing obesity prevention in primary healthcare settings. Nursing administrators can design training programs

for nurses, equipping them with the skills needed to address obesity-related challenges effectively, and allocate resources to community outreach and health education initiatives.

For the Government

This study provides evidence-based recommendations for public health strategies aimed at reducing obesity among reproductive-aged women. Policymakers can leverage these findings to develop community-based interventions and awareness campaigns addressing obesity's root causes, reducing the economic burden associated with treating obesity-related diseases and fostering healthier communities.

State, Country, and Global Implications

The study has far-reaching implications for the state, country, and global community. It highlights the economic benefits of reducing obesity rates, contributing to improved productivity and reduced healthcare costs. The findings can guide state-level initiatives addressing disparities in obesity prevention and support the development of inclusive health policies and programs targeting reproductive-aged women.

Globally, this study contributes to the collective effort to combat obesity, aligning with international goals like the World Health Organization's Global Action Plan for the Prevention and Control of Non-Communicable Diseases. By addressing obesity in a specific demographic and geographic context, the study provides valuable insights informing global best practices and supporting the achievement of Sustainable Development Goal 3 (Good Health and Well-being).

In conclusion, this study's significance lies in its potential to improve health outcomes for reproductive-aged women, strengthen nursing practice, advance research, and inform policies at local, national, and global levels. Its multifaceted impact addresses the complex and far-reaching

consequences of obesity, providing actionable insights to promote healthier lives and communities.

1.8 Scope Of The Study

This study is specifically focused on assessing the knowledge and prevention of obesity among women of reproductive age (18-40 years) in Egor Local Government Area, Benin City, Edo State. The study was limited to women within this age group who are residing or conducting business activities in Uselu Market, which is located within the Egor Local Government Area. The study covered their level of knowledge about obesity, it's causes, associated health risks, and preventive practices adopted by them. It also assessed their lifestyle habits such as feeding patterns, physical activity, and weight monitoring practices. This study did not include women outside the specified age range, men, or individuals from other local government areas. Data collection was carried out using structured questionnaires and anthropometric measurements (Height and Weight) to calculate Body Mass Index (BMI) where applicable.

1.9 Operational Definitions of terms

1. **Assessment**

The process of evaluating and measuring the knowledge and practices related to obesity and its prevention, using tools like surveys, interviews, or focus group discussions.

2. **Benin-City**

Benin-City is the capital of Edo State, Nigeria, and provides the broader context for understanding regional influences on obesity trends and prevention strategies.

3. **Egor Local Government**

Egor Local Government is a local government area in Benin-City, Edo State, Nigeria, serving as the study's geographical focus. The area's diverse socio-cultural and economic factors may influence obesity prevalence and knowledge levels.

4. **Knowledge**

Knowledge refers to the awareness, understanding, and information women of reproductive age have about obesity, including its causes, consequences, and prevention strategies. In this study, knowledge is measured by the accuracy of information respondents have about obesity.

5. **Obesity**

Obesity is a medical condition characterized by excessive body fat accumulation, typically defined by a Body Mass Index (BMI) of 30 or higher. In this study, obesity is determined by BMI calculations among women of reproductive age in Egor Local Government.

6. **Prevention**

Prevention encompasses measures, practices, and interventions aimed at reducing obesity risk. These include healthy eating habits, regular physical activity, avoiding sedentary lifestyles, and maintaining a balanced weight.

7. **Women of Reproductive Age**

Women of reproductive age are females between 15-49 years, as defined by the World Health Organization (WHO). This age range is associated with biological fertility and specific health challenges related to obesity.

CHAPTER TWO

LITERATURE REVIEW

This chapter presents a review of existing literature relevant to the study on the assessment of knowledge and prevention of obesity among women of reproductive age in Egor Local Government Area, Edo State. The review is divided into conceptual, theoretical, and empirical aspects to provide a comprehensive understanding of the subject matter.

2.1 Conceptual Review

2.1.1 Concept of Obesity

Obesity is a chronic and multifactorial condition characterized by excessive fat accumulation that may negatively affect health (World Health Organization [WHO], 2023). It is primarily diagnosed using the Body Mass Index (BMI), which classifies individuals based on weight relative to height. According to WHO (2023), a BMI of 25.0–29.9 kg/m² is classified as overweight, while a BMI of 30.0 kg/m² or higher is categorized as obese. Obesity is a significant global health concern due to its association with life-threatening diseases, including cardiovascular diseases, type 2 diabetes, and certain types of cancer. A 2020 study highlights that obesity is a primary risk factor for type 2 diabetes and is linked to various cancers, emphasizing the importance of preventive measures and interventions to reduce these risks (Bluher, 2020).

The development of obesity is influenced by a complex interplay of genetic, environmental, and behavioral factors. Genetic predisposition can significantly contribute to obesity, with heritability estimates ranging from 40% to 70% (Loos & Yeo, 2022). However, environmental factors, such

as the increased availability of energy-dense foods and reduced physical activity, also play a crucial role in its manifestation (Hruby & Hu, 2022). Lifestyle choices, including high-calorie diets and physical inactivity, further exacerbate the risk of developing obesity (Swinburn et al., 2019). Rapid urbanization and globalization have led to significant dietary changes, notably increased consumption of processed and high-fat foods, which have intensified obesity prevalence, especially in developing countries (Cuevas García-Dorado et al., 2019).

Women of reproductive age are particularly susceptible to obesity due to hormonal fluctuations, pregnancy-related weight gain, and postpartum retention of excess weight. Hormonal changes influence fat distribution and metabolism, increasing the likelihood of weight gain and obesity in this demographic (Bahri Khomami et al., 2019). Obesity among women of reproductive age is linked to menstrual irregularities, polycystic ovary syndrome (PCOS), infertility, gestational diabetes, and an increased risk of cesarean delivery (Harrison et al., 2021). Additionally, maternal obesity has significant adverse effects on offspring, increasing the risk of neonatal complications, childhood obesity, and long-term metabolic disorders (D'Souza et al., 2021).

Obesity extends beyond individual health concerns to become a broader socio-economic and public health issue (Katzmarzyk et al., 2019). The economic burden of obesity is substantial, which is due to increased healthcare costs associated with treating obesity-related complications.

2.1.2 BMI and Overweight

Body Mass Index (BMI) is a widely used tool for assessing whether an individual has a healthy body weight in relation to their height. It is a simple and cost-effective method that helps to categorize individuals into different weight categories, such as underweight, normal weight,

overweight, and obese. BMI is calculated by dividing an individual's weight (in kilograms) by the square of their height (in meters), expressed as:

BMI = Weight (kg) / Height (m^2)

The World Health Organization (WHO) defines the categories of BMI as follows:

- Underweight: BMI less than 18.5
- Normal weight: BMI between 18.5 and 24.9
- Overweight: BMI between 25 and 29.9
- Obesity: BMI of 30 or greater

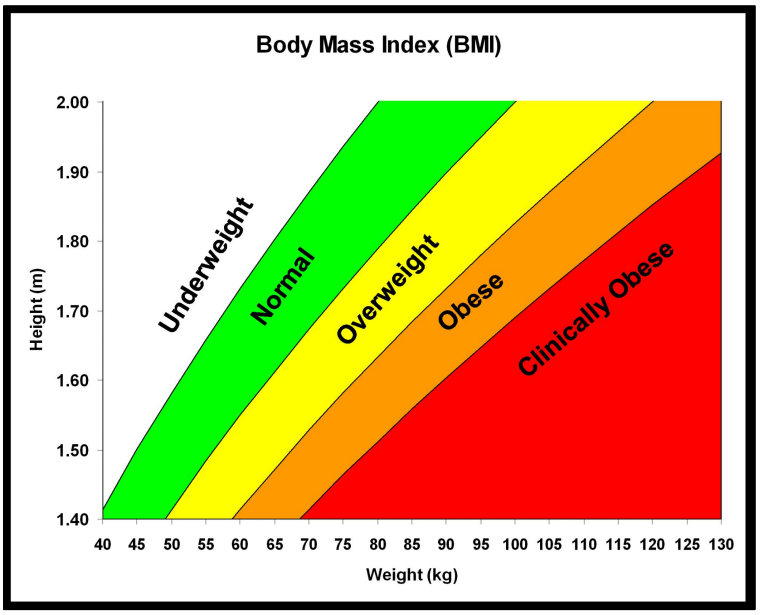

Figure 2.0: Body Mass Index (BMI) Curve

BMI is not a perfect measure of body fat because it does not directly assess body composition (e.g., fat versus muscle mass), but it is widely used in both clinical and research settings as an indicator of potential health risks associated with abnormal weight status.

Overweight and Its Implications

Overweight refers to individuals whose BMI falls between 25 and 29.9, which indicates a higher body weight than what is considered healthy for a given height. Being overweight is associated with a number of health risks, as excess body fat can contribute to various chronic diseases. In particular, overweight individuals are at a greater risk for conditions such as hypertension, type 2 diabetes, heart disease, stroke, and certain types of cancer (WHO, 2021).

Research shows that the risk of developing health problems increases as BMI rises. Even though overweight individuals are not yet classified as obese, they are often at risk of progressing toward obesity. Therefore, it is important not to overlook the health risks of being overweight and to focus on early prevention and intervention. (Afolabi et al., 2021)

BMI is useful for identifying people at risk of obesity, but other factors like waist circumference or body fat percentage should also be considered to get a clearer picture of an individual's health, especially in populations with different body types.

BMI and Women of Reproductive Age

For women of reproductive age, BMI plays a important role in determining overall health and well-being. A high BMI can affect fertility, pregnancy outcomes, and maternal health. Overweight and obese women are at an increased risk of complications such as gestational diabetes, preeclampsia, and labor difficulties (Ogunwole, Zera, & Stanford, 2021). Moreover,

excess body weight can disrupt hormonal balance, leading to menstrual irregularities and reduced fertility (American Society for Reproductive Medicine, 2021).

2.1.3 Significance of Addressing Obesity in Women of Reproductive Age

Tackling obesity in women of reproductive age is important because it affects maternal health, fetal development, and long-term well-being. Women in this demographic face unique physiological and metabolic challenges that increase their risk of obesity-related complications, making prevention and management strategies essential (Liu et al., 2021).

Obesity significantly impacts reproductive health by increasing the risk of menstrual irregularities, polycystic ovary syndrome (PCOS), and infertility (Zheng et al., 2024). Studies have shown that excess body fat disrupts hormonal balance, leading to ovulatory dysfunction and reduced fertility rates (Marinelli et al., 2022). Additionally, obesity during pregnancy is associated with a higher incidence of gestational diabetes mellitus (GDM), preeclampsia, and cesarean deliveries, all of which pose risks to both the mother and child (Poblete et al., 2021).

From a fetal development perspective, maternal obesity increases the likelihood of adverse neonatal outcomes, including macrosomia (excessive birth weight), congenital anomalies, and stillbirth (Ikedionwu et al., 2020). Furthermore, children born to obese mothers have a heightened risk of childhood obesity, metabolic syndrome, and cardiovascular diseases later in life, perpetuating a cycle of obesity across generations (Dearden et al., 2023). Addressing obesity in women of reproductive age is a key step in breaking this cycle and improving long-term health.

Beyond health implications, obesity among women of reproductive age contributes to significant healthcare costs. The economic burden of obesity includes increased medical expenditures related to pregnancy complications, neonatal care, and the treatment of obesity-related diseases (Katzmarzyk et al., 2019). Healthcare systems in developing countries, including Nigeria, face additional strain due to limited resources and inadequate maternal health services, making obesity prevention an urgent public health priority (Ezeh et al., 2022).

2.1.4 Historical Perspectives on Obesity Awareness and Management

Obesity management has improved over time due to medical advances, changing societal views, and scientific research. Historically, obesity was often regarded as a symbol of wealth and prosperity, particularly in ancient civilizations where food scarcity was a common issue (Brown & Green, 2019). In many traditional societies, a larger body size was associated with fertility, health, and social status, particularly among women of reproductive age (Pradeilles et al., 2022). As medical knowledge grew, the health risks of excess weight became clearer, leading to changes in public health policies and obesity management.

In recent decades, obesity has transitioned from being a concern of aesthetics to a major global public health issue. The obesity epidemic that emerged in the late 20th and early 21st centuries was driven by industrialization, urbanization, and the growing availability of processed and fast foods. Sedentary lifestyles and technological advancements further exacerbated the problem, prompting international organizations like the WHO and Centers for Disease Control and Prevention (CDC) to prioritize obesity prevention through health education, policy interventions, and community-based programs (WHO, 2023).

The management of obesity has shifted from generic weight-loss methods to personalized treatment plans. Modern interventions include behavioral therapy, pharmacological treatments, and, in severe cases, bariatric surgery (Wharton et al., 2020). Public health initiatives now emphasize the importance of a multi-sectoral approach, integrating government policies, healthcare systems, and community support to combat obesity effectively (Katzmarzyk et al., 2019).

In Nigeria, historical perspectives on obesity are shaped by cultural attitudes toward body weight, with traditional preferences for fuller body sizes still influencing perceptions of obesity risk (Ezeh et al., 2022). While recent public health campaigns have increased awareness, socioeconomic barriers and limited healthcare access continue to hinder effective obesity management in regions like Egor Local Government Area.

2.1.5 Knowledge and Prevention Practices Regarding Obesity

Knowledge of Obesity and Its Causes

Obesity is caused by many factors, including genetics, behavior, environment, and socioeconomic conditions. Public awareness of these causes varies significantly, influenced by education levels, cultural beliefs, and access to health information (Ezeh, Okonkwo, & Uchenna, 2022). In many developing regions, including parts of Nigeria, larger body sizes are often culturally associated with prosperity and health, leading to misconceptions about obesity (Ajayi & Olatunbosun, 2020). Studies indicate that women of reproductive age may have limited knowledge about the risk factors and health implications of obesity, which can hinder effective prevention and management strategies (Afolabi et al., 2021).

Prevention Practices for Obesity

Effective obesity prevention requires a comprehensive approach that includes individual, community, and policy-level interventions:

1. **Dietary Modifications:** Encouraging the consumption of balanced diets rich in fruits, vegetables, whole grains, and lean proteins while reducing the intake of processed foods and sugary beverages is fundamental. Nutrition education programs have been effective in promoting healthy eating habits among women of childbearing age (World Health Organization [WHO], 2023).

2. **Physical Activity:** Regular physical activity is crucial in maintaining a healthy weight. Initiatives that promote exercise, such as community fitness programs and active transportation policies, have shown success in increasing physical activity levels (Katzmarzyk et al., 2019).

3. **Behavioral Interventions:** Programs that use goal setting, self-monitoring, and counseling, have been successful in helping people make lasting lifestyle changes.

4. **Public Health Campaigns:** Government-led campaigns aimed at raising awareness about obesity and promoting healthy lifestyles play a significant role in prevention efforts. These campaigns often utilize mass media to disseminate information and encourage behavior change (Centers for Disease Control and Prevention [CDC], n.d.).

5. **Healthcare Interventions:** Routine health screenings and counseling by healthcare professionals are vital in early detection and management of obesity. Integrating obesity

prevention into primary healthcare services ensures that individuals receive appropriate guidance and support (WHO, 2023).

6. **Policy Measures:** Implementing policies such as taxing sugary drinks, regulating food advertising, and creating environments that facilitate physical activity are effective strategies. For example, restrictions on junk food advertising have been proposed to reduce children's exposure to unhealthy food marketing (World Obesity Federation, n.d.).

Challenges in Implementing Prevention Strategies

Although many prevention strategies exist, several challenges limit their effectiveness, especially in low- and middle-income countries.

1. **Cultural Perceptions:** In some cultures, larger body sizes are viewed positively, which can undermine obesity prevention efforts (Ajayi & Olatunbosun, 2020).

2. **Economic Constraints:** The high cost and limited availability of healthy foods make it difficult for individuals in low-income settings to adopt healthy eating habits (International Fund for Agricultural Development [IFAD], 2022).

3. **Limited Access to Healthcare:** Inadequate healthcare infrastructure and resources hinder the delivery of effective obesity prevention and management services (National Institutes of Health [NIH], 2021).
4. **Urbanization and Sedentary Lifestyles:** Rapid urbanization has resulted in more inactive lifestyles and greater consumption of processed foods, leading to higher obesity rates.

2.1.6 Importance of Obesity Prevention in Women of Reproductive Age

Obesity in reproductive-age women is a major public health concern because it affects their health, fertility, and long-term well-being. This demographic is at an increased risk of developing obesity-related complications, which not only affect their own health but also have significant implications for maternal and child health outcomes.

Health Risks of Obesity in Women of Reproductive Age

Obesity in women of reproductive age is associated with several chronic conditions, including cardiovascular diseases, diabetes mellitus, hypertension, and certain types of cancer (Hayes et al., 2020). These conditions significantly increase morbidity and mortality rates, presenting a major health burden. Furthermore, obesity during the reproductive years can complicate pregnancy, contributing to gestational diabetes, preeclampsia, and an increased risk of cesarean delivery (Lewandowska et al., 2020). These risks extend beyond pregnancy, affecting future health outcomes for women and their children.

Reproductive and Maternal Health Implications

The prevention of obesity in women of reproductive age is essential for improving reproductive health outcomes. Obesity is known to negatively affect fertility, with overweight and obese women often experiencing ovulatory dysfunction, menstrual irregularities, and reduced fertility (Marinelli et al., 2022). By preventing obesity in this group, the likelihood of healthier pregnancies and better long-term reproductive health can be significantly enhanced.

Intergenerational Impact

Obesity prevention benefits both women and future generations. Maternal obesity has been linked to an increased risk of childhood obesity, as maternal health can influence fetal development and later life health outcomes for offspring (Denizli et al., 2022). Children born to obese mothers are more likely to develop obesity themselves, continuing the cycle of poor health outcomes..

Economic and Social Impact

Obesity prevention in women of reproductive age also holds significant economic and social value. Obesity-related diseases contribute substantially to healthcare costs, with the management of obesity and its comorbidities placing a strain on healthcare systems globally (Mohajan et al., 2023). Furthermore, women in this age group are often in the workforce, and obesity-related health issues can lead to reduced productivity and increased absenteeism (Dall et al., 2024). By preventing obesity, the economic burden of these conditions can be reduced, improving the overall quality of life for individuals and communities.

Socio-Cultural Factors and Health Promotion

In regions like Egor Local Government Area (LGA), where socio-cultural factors play a significant role in shaping health behaviors, the importance of culturally appropriate obesity prevention programs cannot be overstated. Local customs, dietary habits, and attitudes toward body image and health can influence the success of interventions. Tailored health promotion programs that respect and incorporate local cultural norms are essential to effectively raise awareness and encourage healthy lifestyle changes among women of reproductive age (Ku et al., 2022).

2.1.7 Factors Influencing Obesity Knowledge and Prevention

The prevention of obesity among women of reproductive age in Egor Local Government Area (LGA) is affected by factors like income, education, culture, healthcare access, and social support, all influenced by local conditions and norms.

Socioeconomic Factors

Socioeconomic status (SES) is a key determinant of health knowledge and behaviors. Lower-income women are more likely to face challenges in accessing resources that support healthy behaviors, such as nutritious food, healthcare services, and opportunities for physical activity (Alageel et al., 2023). In Egor LGA, where poverty rates can be high, many women may prioritize basic needs over health-related decisions, such as adopting a balanced diet or engaging in regular exercise.

Financial constraints also affect dietary choices. Women in lower socioeconomic strata are more likely to rely on cheaper, energy-dense foods that are high in fats and sugars, which contribute to obesity (Hojjat et al., 2021). Furthermore, the limited availability of affordable physical activity options (e.g., gyms, safe spaces for outdoor exercise) can reduce opportunities for weight management.

Cultural Beliefs and Practices

Cultural beliefs and practices can either hinder or facilitate obesity prevention. In many African communities, cultural perceptions of body size often associate larger body sizes with prosperity, wealth, and fertility. Obesity is sometimes seen as a symbol of affluence and success, particularly among women (Sumińska et al., 2022).

Traditional views on food and body image may prevent people from adopting healthy lifestyles. For instance, in some African communities, women are encouraged to eat larger portions as a sign of hospitality or respect (Oguntona et al., 2020). These social practices can lead to overeating, which increases the risk of obesity. Furthermore, cultural norms may limit women's participation in physical activities, particularly outdoor exercises, which may be perceived as inappropriate or unfeminine in some settings (Akinpelu et al., 2020).

Educational Level

Higher levels of education are associated with greater awareness of the health risks associated with obesity, including its links to chronic diseases like diabetes and hypertension (Maddah et al., 2018). Educated women are more likely to understand the importance of a balanced diet, regular physical activity, and maintaining a healthy body weight. In contrast, lower levels of education are often linked to limited health literacy and a lower understanding of obesity prevention strategies (Chrissini et al., 2021).

Health education programs aimed at improving knowledge about obesity prevention can empower women in Egor LGA to make healthier lifestyle choices.

Access to Healthcare Services

The availability and accessibility of healthcare services are crucial factors in obesity prevention. Women in Egor LGA, particularly those in rural areas, may experience limited access to healthcare services that provide obesity-related education, preventive screenings, and weight management programs. Health centers in rural areas may be understaffed and lack specialized services such as nutrition counseling and obesity management programs. Additionally, the cost

of healthcare services can be prohibitive for low-income women, further limiting their ability to seek professional advice on obesity prevention (Baker et al., 2020).

Social Support Networks

Social support networks, including family, friends, and community members, can have a significant influence on health behaviors. In Egor LGA, as in many African communities, family and social networks are strong and can either encourage or inhibit healthy behaviors (Asante et al., 2019). Positive reinforcement from family members and peers can motivate women to adopt healthier lifestyles, such as engaging in physical activity and making better dietary choices. Conversely, in communities where obesity is normalized or even celebrated, social networks may inadvertently perpetuate unhealthy behaviors.

2.1.8 Specific Challenges/Context in Egor LGA

Egor Local Government Area (LGA) in Edo State, Nigeria, faces specific challenges that impact the knowledge and prevention of obesity among women of reproductive age. These challenges can be grouped into socio-cultural, economic, infrastructural, and health system-related issues.

Socio-Cultural Challenges

One of the major socio-cultural challenges in Egor LGA is the widespread cultural perceptions regarding body size and weight. In many Nigerian communities, including Egor, larger body sizes are often perceived as a sign of wealth, fertility, and good health, particularly among women (Obinna, 2020). This cultural norm may contribute to a lack of urgency in addressing obesity, as large body sizes are not necessarily seen as problematic or as risk factors for chronic

diseases like hypertension, diabetes, and cardiovascular diseases. Consequently, women in this region may not perceive obesity as a health risk, leading to poor adoption of prevention practices.

In addition to cultural beliefs, there is often limited awareness of obesity and its consequences. According to Peter et al. (2023), in rural and semi-urban Nigerian settings, including Edo State, there is a lack of education and public health campaigns focused on obesity prevention. As a result, women may lack knowledge about the causes of obesity, healthy lifestyle choices, and the benefits of weight management. This knowledge gap significantly hinders the effectiveness of obesity prevention strategies.

Economic and Infrastructural Barriers

Egor LGA, like many rural and semi-urban areas in Nigeria, struggles with economic limitations and infrastructural deficits that impede the implementation of effective obesity prevention programs. The majority of residents in Egor live in conditions characterized by limited access to health services, poor road networks, and inadequate healthcare facilities (Onwujekwe et al., 2020).

The economic situation in the area leads to unhealthy eating habits, as many households depend on cheap, high-calorie, and low-nutrient foods because healthier options are too expensive. As noted by Ugwu et al. (2019), processed foods, which are high in fats and sugars, are more affordable and accessible in local markets, further promoting unhealthy eating habits among women. The lack of affordable and nutritious food choices makes it difficult for women to maintain a balanced diet, thereby increasing their risk of obesity.

Health System and Policy Challenges

The health system in Egor LGA may face challenges related to underfunding, inadequate healthcare personnel, and insufficient health education programs. Another major barrier is the lack of public health programs focused on preventing obesity in women of reproductive age. While there are national policies and guidelines on obesity prevention, such as the National Policy on Food and Nutrition, these policies often face implementation challenges at the local government level (Peter et al., 2023). Inadequate training for healthcare workers in obesity prevention and management, coupled with a lack of specialized obesity care services, means that many women in Egor may not receive proper counseling on weight management or obesity-related health risks.

2.1.9 Obesity Prevention Interventions

Obesity prevention efforts have developed over time to tackle a mix of genetic, environmental, behavioral, and socioeconomic factors. Effective prevention strategies aim to reduce the incidence of obesity by promoting healthy lifestyles, improving dietary habits, encouraging physical activity, and increasing public awareness about the risks associated with obesity (World Health Organization [WHO], 2020).

Community-Based Interventions

Community-based obesity prevention programs have proven to be successful in many parts of the world, as they target both individual behaviors and the broader environmental and social factors that contribute to obesity. These interventions typically involve collaborations between

local governments, healthcare providers, schools, community organizations, and other stakeholders. One such example is the use of community health promotion campaigns aimed at educating the public about healthy eating and the importance of physical activity.

School-Based Interventions

School-based obesity prevention interventions have also been a cornerstone of public health strategies, particularly for children. However, these programs are equally important for women of reproductive age, especially when they are caregivers and role models for children. Schools are unique settings for obesity prevention because they can shape the attitudes and behaviors of individuals early, leading to long-term improvements in health behaviors.

Policy and Environmental Interventions

Policy and environmental interventions focus on creating supportive environments that make healthy choices easier for individuals. These can include initiatives like the implementation of taxes on sugary beverages, regulations requiring nutrition labeling in restaurants and food outlets, and urban planning that prioritizes walking and cycling paths. Such interventions work at a macro level to create environments where unhealthy food options are less accessible, and physical activity becomes more integrated into daily life (Swinburn et al., 2019).

In Egor LGA, local government policies that promote healthier environments, such as better waste management and improved access to recreational areas, could further enhance obesity prevention efforts. Encouraging the provision of healthy food options in local markets, supported by public health campaigns, could also play a significant role in reducing obesity risk among women.

Healthcare System Interventions

Healthcare interventions are essential in preventing and managing obesity, particularly for women of reproductive age, who may face specific health risks due to obesity during pregnancy and childbirth. Healthcare providers can play a critical role in the prevention of obesity by screening for early signs of obesity, offering counseling on healthy eating and exercise, and prescribing weight management strategies. Furthermore, integrating obesity prevention into maternal health services can help address the specific needs of women during their reproductive years. Offering counseling and lifestyle modification programs tailored to this group can help reduce the risks of obesity-related complications, such as gestational diabetes and hypertension.

Digital and Technological Interventions

The role of technology in obesity prevention is becoming increasingly prominent. Mobile applications, fitness trackers, and online weight loss programs have made it easier for individuals to monitor their diet, physical activity, and overall health. In the context of Egor LGA, mobile health interventions could be particularly beneficial, as they could provide educational materials, dietary tracking tools, and virtual support networks to women of reproductive age.

2..10 Long-Term Sustainability of Prevention Interventions

For obesity prevention programs to be effective long-term, they need to be maintained, not just implemented. Sustainable interventions are key to ensuring lasting health improvements, especially in areas like Egor LGA, where cultural, economic, and infrastructure factors impact the success of health efforts.

Key Considerations for Sustainability

First, interventions must be culturally appropriate and tailored to the specific needs of the population. In Egor LGA, this means considering local diets, physical activity levels, and the community's understanding of obesity and its risks. Second, long-term success depends on involving and empowering the local community. Community-based approaches that include local stakeholders, such as health workers and community leaders, tend to be more sustainable because they build local capacity and foster ownership of health outcomes (Muhamad Khair et al., 2020). Integrating obesity prevention into existing programs like maternal and child health services ensures that it becomes part of routine healthcare.

Third, funding and policy support are essential for sustainability. Securing consistent financial backing from both government and non-government sources is crucial, as is having public health policies that prioritize obesity prevention and incorporate it into national and local health strategies. Lastly, monitoring and evaluation are key to ensuring interventions remain effective.

Barriers to Sustainability

The sustainability of obesity prevention programs faces several challenges. Socioeconomic factors, like poverty and limited access to affordable healthy food, can make it hard to maintain long-term changes. In Egor LGA, for example, women may struggle to follow dietary guidelines due to financial constraints. Cultural beliefs about body image and health can also prevent the adoption of obesity prevention practices, so these norms need to be considered when designing interventions (Sumińska et al., 2022).

Another challenge is the lack of infrastructure for ongoing health education. In rural areas like Egor LGA, limited access to healthcare facilities and trained professionals can make it difficult

to sustain obesity prevention efforts. Community members may also struggle to maintain behavioral changes due to a lack of resources or educational opportunities. Therefore, interventions must be designed to be sustainable with minimal resources over time (Cunningham-Sabo et al., 2022; Mullen & Alexander-Scott, 2024).

Strategies for Enhancing Sustainability

1. Cost-effective and Scalable Interventions: Design programs using existing community resources, such as local health centers or schools, to ensure the program can continue without needing extensive new infrastructure.
2. Engagement of Local Stakeholders: Engage local government, NGOs, and the private sector to secure resources for the program's long-term sustainability.
3. Promotion of Self-Sustaining Models: Support community-run health initiatives or peer support groups, empowering individuals to take ownership of their health and ensuring the program remains operational even when external funding decreases.
4. Community-based Approaches: Focus on autonomy and local leadership, which can serve as a model for other areas facing similar challenges (Smith et al., 2019).
5. Integration into Broader Health Policies: Incorporate obesity prevention into existing health programs, such as maternal and child health services, to ensure ongoing support for healthy lifestyles, particularly during maternal health check-ups or postpartum care (Swinburn et al., 2019).

2.2 Theoretical Framework

The role of theory in this research is essential for providing a structured approach to understanding the complex factors influencing obesity knowledge and prevention behaviors

among women of reproductive age in Egor Local Government Area (LGA), Edo State. Theories serve as frameworks that help to identify, explain, and predict health behaviors by outlining the key variables that influence decision-making and behavior change. In the context of obesity prevention, health behavior theories provide a foundation for understanding why some women may adopt preventive measures, while others may not, despite being aware of the health risks associated with obesity.

2.2.1 The Health Belief Model (HBM)

The Health Belief Model (HBM) is one of the most widely used theoretical frameworks in public health research and behavior change interventions. Developed in the 1950s by social psychologists, primarily Irwin Rosenstock, the model was designed to explain and predict health-related behaviors, particularly in the context of preventive health actions. The HBM posits that individuals are more likely to engage in health-promoting behaviors, such as obesity prevention, if they believe that they are susceptible to a health problem, that the problem has serious consequences, and that taking preventive action will reduce their risk. In this way, the model emphasizes the cognitive factors that drive decision-making regarding health behavior.

The core constructs of the Health Belief Model are designed to assess and influence individual perceptions of health risks and the effectiveness of preventive actions. These constructs include:

1. **Perceived Susceptibility**: This refers to an individual's belief in their vulnerability to a health issue, such as obesity. If a person believes they are at risk of developing obesity, they are more likely to engage in behaviors that prevent or mitigate that risk. In the case of women in Egor LGA, their perception of how likely they are to develop obesity, based on factors like family history, lifestyle, or current health status, will influence their health

behaviors.

Research suggests that perceived susceptibility plays a crucial role in health behavior change. For instance, individuals who perceive themselves as being at high risk for obesity-related complications (such as diabetes, hypertension, or cardiovascular diseases) may be more motivated to prevent obesity through lifestyle changes like diet and physical activity.

Perceived Severity: This construct refers to an individual's belief about the seriousness of the consequences of a health issue. In the context of obesity, perceived severity would include an individual's understanding of the potential health complications associated with obesity, such as heart disease, diabetes, and reduced quality of life. If a woman in Egor LGA believes that the long-term effects of obesity are severe—such as complications in pregnancy, childbirth, or general health—she may be more likely to take preventive actions.

Studies have shown that when individuals believe that a health issue has severe consequences, they are more likely to engage in preventive behaviors. Perceived severity, when coupled with perceived susceptibility, can lead to greater motivation to adopt behaviors that reduce health risks.

Perceived Benefits: This construct addresses the belief in the effectiveness of taking a specific action to reduce the risk or severity of a health issue. For obesity prevention, perceived benefits include the belief that lifestyle changes such as maintaining a healthy weight, exercising, and eating a balanced diet can effectively prevent obesity-related complications.

The higher the perceived benefits of a preventive action, the more likely individuals are to take that action. Research indicates that when people believe that obesity prevention strategies, like regular exercise or dietary modifications, will help them avoid obesity or its complications, they are more motivated to follow these behaviors. For example, women who believe that preventing obesity will improve their fertility or overall health may be more likely to adopt healthier practices.

2. **Perceived Barriers**: Perceived barriers refer to the individual's perception of the obstacles that may prevent them from taking action, such as the time, effort, or financial cost associated with adopting healthier lifestyle habits. In the case of obesity prevention, women in Egor LGA may face barriers such as limited access to nutritious food, lack of time to exercise, or cultural norms that prioritize certain dietary habits.

   Barriers can significantly affect health behavior outcomes. When individuals perceive more barriers to adopting preventive measures, they are less likely to take action. Therefore, understanding the barriers faced by women in this community will be key to developing interventions that address these obstacles and enhance the likelihood of behavior change.

3. **Cues to Action**: Cues to action are external factors that prompt individuals to take action. These cues can include reminders or triggers, such as health messages, advice from healthcare professionals, or public health campaigns. For example, women in Egor LGA may be encouraged to adopt obesity prevention strategies through community health talks, media campaigns, or direct encouragement from family members or healthcare providers.

Research has shown that cues to action, such as health promotions or environmental changes (e.g., the availability of healthy food options), can serve as significant motivators for behavior change. The use of cues to action in public health interventions can lead to greater participation in obesity prevention programs.

4. **Self-Efficacy**: Self-efficacy refers to an individual's confidence in their ability to successfully perform a health behavior. In the case of obesity prevention, self-efficacy would reflect a woman's belief in her ability to adopt and maintain healthy eating habits or engage in regular physical activity. Women with high self-efficacy are more likely to believe that they can overcome obstacles and successfully manage their weight. Self-efficacy has been shown to be a strong predictor of health behavior adoption. Studies have demonstrated that individuals with higher levels of self-efficacy are more likely to take preventive actions to manage or avoid health risks. Therefore, interventions aimed at improving self-efficacy, such as providing skills training, emotional support, and positive reinforcement, can enhance the likelihood of successful obesity prevention efforts.

2.2.1.2 Application of the Health Belief Model (HBM) to the Study

The Health Belief Model (HBM) is used in this study to explore how women in Egor Local Government Area (LGA) perceive and act on obesity prevention. It examines how beliefs about susceptibility to obesity, the seriousness of its consequences, and the benefits of prevention influence behavior. Women who see themselves at risk of obesity and understand its health risks, such as diabetes and hypertension, are more likely to adopt preventive measures. However, cultural views in Egor, where larger body sizes are sometimes seen as signs of wealth and health, may reduce the perception of obesity as a health threat.

The model also highlights motivations and barriers to obesity prevention. Women may be motivated by the belief that maintaining a healthy weight improves fertility, reduces chronic disease risks, and enhances appearance, but financial constraints, lack of healthy food options, and cultural norms that favor high-calorie diets can act as barriers (Ogden et al., 2019). Cues to action, such as health campaigns, advice from healthcare providers, or observing family members' obesity-related health issues, can encourage behavior change.

Self-efficacy, or the belief in one's ability to make changes, is also important. Women who feel confident in their ability to adopt healthier behaviors, such as cooking nutritious meals and increasing physical activity, are more likely to succeed. Interventions like counseling, support groups, and fitness programs can help build this confidence.

In applying the HBM, this study aims to identify the key factors that affect obesity prevention behaviors among women in Egor LGA and suggests that interventions should be tailored to address local beliefs, barriers, and motivations, and improve self-efficacy.

2.3 Empirical Review

2.3.1 Studies on the Level of Knowledge Regarding Obesity Among Women of Reproductive Age

A similar study by Olanrewaju et al. (2021) focused on young female adults in Owo, Nigeria, to assess their knowledge of obesity and its implications for reproductive health outcomes. This descriptive cross-sectional study involved 500 participants aged 19–35 years, who were systematically sampled and completed structured, self-administered questionnaires assessing their obesity knowledge on a nine-point scale. While 62% of respondents had high knowledge of

obesity risk factors, only 13.2% demonstrated high awareness of its health implications. The study found that only 34.4% of participants identified infertility as a potential consequence of obesity, and 33% associated obesity with obstructed labor. The prevalence of obesity in this study was 18.6%, and high-calorie food consumption was widespread. The authors concluded that while obesity risk factor awareness was fairly high, knowledge of its broader health implications remained limited, reinforcing the need for community-based educational programs targeting women of reproductive age.

In the United States, Herring et al. (2013) conducted a study to assess BMI knowledge and awareness of obesity's effects on reproductive health among women in a predominantly African American urban population. Participants completed surveys evaluating their understanding of obesity's cardiometabolic and reproductive risks. The study found that although most women were aware of obesity's connection to diabetes, hypertension, and cardiovascular diseases, their knowledge of its reproductive consequences was significantly lower. Many participants were unaware of obesity's association with adverse neonatal outcomes and cancers such as breast and endometrial cancer. Despite having some level of health literacy and education, the findings underscored a gap in reproductive health knowledge, suggesting that public health interventions should emphasize obesity's effects on fertility and maternal health.

Lastly, Agwara et al. (2023) conducted a hospital-based cross-sectional study in Limbe District Hospital and Buea Road Integrated Health Centre, Cameroon, to assess the prevalence and knowledge of maternal obesity and excessive gestational weight gain (GWG). The study involved 317 pregnant women who provided data on their socio-demographic characteristics, obesity prevalence, and knowledge of excessive GWG complications. The results showed that 42.3% of participants were obese, while 41.6% experienced excessive GWG. Knowledge levels

varied, with 46.1% of participants demonstrating poor understanding of obesity's complications in pregnancy and 77.3% having moderate knowledge of safe weight management methods. The study found that late antenatal care booking was associated with excessive GWG, highlighting the need for early prenatal education on obesity risks. The researchers recommended targeted interventions to improve obesity awareness and management among pregnant women.

2.3.2 Studies on the Extent of Practice of Obesity Prevention Strategies Among Women of Reproductive Age

In a study conducted by the World Health Organization (WHO, 2021), the obesity prevention practices among women aged 18–49 in 30 countries across different continents were assessed. Using a mixed-method approach, the study involved structured questionnaires and interviews with 10,000 women from diverse socioeconomic backgrounds. Findings revealed significant disparities in obesity prevention efforts. In high-income countries, 65% of women engaged in regular physical activity and followed recommended dietary guidelines, while in middle-income countries, 45% of women practiced some form of obesity prevention despite financial constraints limiting access to healthy food. In low-income countries, only 20% of women actively practiced obesity prevention, with cultural beliefs and lack of resources acting as major barriers. The study concluded that access to education and healthcare services significantly influenced obesity prevention efforts and recommended policy interventions to promote healthier food options and physical activity globally.

A national study by Adebayo et al. (2022) examined obesity prevention practices among Nigerian women across six states, covering both urban and rural areas. Using structured questionnaires and focus group discussions, data were collected from 1,200 women aged 20–45.

The findings showed that 58% of urban women made conscious efforts to eat healthily, while only 35% of rural women had access to nutritious food. Physical activity levels were moderate, with 42% engaging in some form of exercise, though many cited lack of time and motivation as barriers. Additionally, 60% of participants had some knowledge of obesity prevention, but most lacked practical guidance on maintaining a healthy lifestyle. The study concluded that rural women faced more challenges in practicing obesity prevention due to limited healthcare access and recommended community-based interventions to promote awareness and support healthier lifestyles.

In South Africa, Mkhize and Nkosi (2020) conducted a study focusing on obesity prevention among pregnant women receiving antenatal care. The study involved 500 pregnant women and assessed their adherence to obesity prevention guidelines through interviews with healthcare providers and direct observation of dietary intake and physical activity. The findings showed that only 30% of women followed recommended dietary guidelines, with 50% reporting high-calorie diets due to cultural beliefs that pregnancy requires excessive eating. Additionally, only 20% engaged in moderate exercise, while the majority avoided physical activities due to myths that exercise could harm the baby. Healthcare guidance was limited, with only 40% of women receiving structured education on obesity prevention from their healthcare providers. The study recommended that antenatal care programs incorporate structured health education sessions to encourage healthy weight management during pregnancy.

A study by Lopez et al. (2021) in Brazil examined the effectiveness of community-based obesity prevention programs targeting 800 women of reproductive age. Participants were divided into two groups: one receiving educational interventions and the other receiving no specific intervention. The study found that 70% of women in the intervention group adopted healthier

dietary habits, while only 35% of the non-intervention group did the same. Additionally, 55% of the intervention group participated in weekly exercise sessions, compared to just 20% of the non-intervention group. Women in the intervention group also reported higher motivation levels and continued healthy practices six months after the study. The researchers concluded that community-led programs significantly improved adherence to obesity prevention strategies and recommended expanding such interventions nationwide.

At the local level, Omoregbe et al. (2023) conducted a study on obesity prevention among women in Egor Local Government Area, Edo State, Nigeria. The study surveyed 400 women and used focus group discussions and dietary assessments to examine their knowledge and practices. The results indicated that while 55% of respondents were aware of obesity prevention strategies, only 30% actively practiced them. Physical activity levels were low, with only 25% engaging in regular exercise, citing time constraints and lack of motivation as major barriers. Additionally, 40% of women reported making efforts to eat balanced diets, though affordability of healthy food remained a significant challenge. The study concluded that while awareness of obesity prevention is increasing, practical implementation remains low due to financial and cultural constraints. It recommended government and NGO involvement in promoting affordable healthy food and fitness programs in the community.

2.3.3 Studies on Factors Influencing the Prevention Practices Related to Obesity in Similar Populations

A global study by **Wang et al. (2020)** examined how socioeconomic and educational factors influence obesity knowledge and prevention practices among women of reproductive age in 15 countries. Using data from the World Health Organization's Global Health Observatory, the

study surveyed 12,500 women aged 18–49 across high-income and low-income countries. Researchers used structured questionnaires to assess awareness of obesity risks, dietary habits, and engagement in physical activity. The findings revealed that women with higher education levels had significantly greater knowledge of obesity risks and prevention strategies. In high-income countries, 78% of participants correctly identified obesity risk factors, compared to only 45% in low-income settings. Financial constraints also played a major role, as women in low-income countries found it difficult to afford healthier food options. The study concluded that increasing access to education and financial empowerment could enhance obesity prevention efforts globally.

A national study by **Aluko and Adeyemi (2021)** investigated the impact of cultural beliefs on obesity prevention knowledge and practices among Nigerian women of reproductive age. The study surveyed 600 women from three geopolitical zones in Nigeria through structured questionnaires and in-depth interviews. It assessed perceptions of body image, obesity risks, and adherence to dietary and physical activity recommendations. Results indicated that in many Nigerian communities, a larger body size is often associated with affluence, fertility, and good health. Over 60% of the participants viewed weight gain as a sign of prosperity, leading to low motivation for obesity prevention. Women from urban areas demonstrated higher awareness of obesity risks than those in rural areas. The study recommended culturally sensitive health interventions that respect traditional beliefs while promoting healthier lifestyles.

In a regional study, **Okafor et al. (2019)** examined the role of healthcare accessibility in obesity prevention among 750 women of reproductive age across Ghana, Nigeria, and Senegal. The researchers conducted a cross-sectional survey to assess women's knowledge of obesity-related diseases and their frequency of preventive health check-ups. The findings indicated that women

who had regular access to healthcare services were more likely to engage in obesity prevention practices. Approximately 72% of participants who attended routine health check-ups were aware of obesity-related risks, compared to only 38% of those with limited healthcare access. The study concluded that improving healthcare infrastructure and affordability could significantly enhance obesity prevention efforts in West Africa.

A local study by **Omoregie and Osagie (2022)** focused on the awareness and practice of obesity prevention strategies among women of reproductive age in Edo State, Nigeria. The study surveyed 400 women from urban and rural areas using structured questionnaires. Key areas assessed included knowledge of Body Mass Index (BMI), engagement in physical activity, and adherence to dietary recommendations. The results showed that while 58% of women had heard about obesity, only 32% correctly understood BMI classifications. Furthermore, only 40% engaged in regular exercise, citing time constraints and lack of motivation as barriers. Women in urban areas exhibited better knowledge and adherence to preventive practices compared to those in rural areas. The study emphasized the need for community-based health education programs to improve obesity awareness.

An international study by **Johnson et al. (2020)** explored how digital health campaigns influence obesity prevention knowledge and behavior among women in the United States. The study analyzed data from an online health intervention that targeted 1,500 women aged 18–45. Participants received weekly digital content, including videos, articles, and interactive quizzes on obesity prevention. The findings demonstrated that digital health campaigns significantly improved obesity knowledge and behavior change. Women who actively engaged with the content were twice as likely to adopt healthier eating habits and regular exercise routines

compared to those who did not participate. The study recommended expanding digital health education programs to reach broader populations, particularly in low-income communities.

2.4 Summary of Literature Review

The literature review highlights key findings regarding the knowledge and prevention of obesity among women of reproductive age. Obesity is increasingly prevalent among women, particularly in low- and middle-income countries, due to urbanization, poor diets, and sedentary lifestyles. Obesity during reproductive years is linked to serious maternal and fetal health risks, making prevention crucial for improving health outcomes.

Many women recognize obesity as a health risk, but there are gaps in understanding its causes, consequences, and prevention strategies (Kahan & Manson, 2019). Cultural factors, such as the perception of higher body weight as a sign of wealth, may reduce motivation to adopt preventive behaviors.

Barriers to effective prevention include socioeconomic factors like limited access to healthy food and time constraints, as well as cultural and gender-related challenges (Brown et al., 2019). Successful interventions often involve dietary education, physical activity promotion, and community-based programs, which have been shown to foster long-term behavior changes.

The Health Belief Model (HBM) suggests that people are more likely to take action if they perceive obesity as a serious threat and believe that preventive actions will reduce their risk. However, gaps remain in research specifically focused on obesity in Egor Local Government

Area (LGA), especially regarding how women in this region perceive obesity and adopt prevention strategies.

This study aims to fill these gaps by focusing on obesity knowledge and prevention practices in Egor LGA, addressing the cultural, economic, and environmental factors that influence obesity prevention behaviors..

In conclusion, the study aims to provide valuable awareness into obesity prevention among women in Egor LGA and contribute to the development of culturally relevant interventions and public health policies for healthier lifestyles.

CHAPTER THREE

3.1 RESEARCH METHODOLOGY

This chapter outlines the research methodology employed to achieve the study's objectives. It provides a comprehensive overview of the research approach, encompassing the research design, research setting, target population, sample size determination, sampling technique, and data collection methods. Additionally, it discusses the validity and reliability of the data collection tools, the procedures for data collection and analysis, and the ethical considerations that guided

the study. By detailing these key aspects, this chapter provides a clear understanding of the study's methodology and its potential to yield meaningful insights.

3.1 Research Design

This study will employ a descriptive cross-sectional survey design to assess the knowledge and prevention practices of obesity among women of reproductive age (18-40 years) in Egor Local Government Area of Benin City. This design is chosen for its suitability in describing and analyzing the characteristics, knowledge, and behaviors of a specific population at a particular point in time, without manipulating any variables. Through the use of structured questionnaires, this design enables the collection of relevant data, providing insights into the knowledge, attitudes, and preventive practices of obesity among the target population. By adopting this design, the study aims to identify gaps and inform recommendations for improved health practices, ultimately contributing to better health outcomes for women of reproductive age in the study area.

3.2 Research Setting

This study will take place in Uselu, a densely populated district and headquarters of Egor Local Government Area in Benin City, Edo State, Nigeria. Specifically, the research was conducted at Uselu Market, one of the largest and most bustling markets in the area. The market was chosen for its high concentration of women within the reproductive age range of 18-40 years, who are either traders or residents in the surrounding community. The market's diverse population,

accessibility, and vibrant commercial activities made it an ideal setting for assessing the knowledge and prevention practices of obesity among women of reproductive age in Egor Local Government Area. The unique characteristics of Uselu Market provided a suitable environment for gathering data from a representative sample of women, enabling the study to achieve its objectives.

3.3 Target Population

The target population for this study comprises women of reproductive age (18-40 years) who trade and/or reside within Uselu Market and its surrounding community in Egor Local Government Area, Benin City, Edo State. The population includes market women who are actively involved in trading activities within Uselu Market, as well as women living around the market area who may frequently patronize or interact within the market environment.

3.3.1 Inclusion Criteria

- Women between the ages of 18-40 years.
- Women who are traders in Uselu Market or residents living around Uselu, Egor Local Government Area.
- Women who are willing to participate and give verbal or written consent.
- Women who are available at the time of data collection.

3.3.2 Exclusion Criteria

- Women below 18 years and above 40 years of age.
- Women who do not trade in Uselu Market or do not reside within the Uselu community.
- Women who are unwilling or decline to participate in the study.
- Women who have any physical or mental condition that may hinder their ability to respond appropriately to the questionnaire.

3.4 Sample Size Determination

The standard sample size formula you will be using is often referred to simply as the Cochran's Sample Size Formula for Proportions.

The formula is given by:

$$n = \frac{Z^2.p.(1-p)}{E^2}$$

- Components of the Formula
- n: Required sample size
- Z: Z-value corresponding to the desired confidence level (e.g., 1.96 for a 95% confidence level)
- p: Estimated proportion of the population (if unknown, use 0.5 for maximum sample size)
- E: Margin of error (the acceptable difference between the sample statistic and the population parameter)
- Assuming:
- Confidence level = 95% (Z = 1.96)
- Estimated proportion (p) = 0.5
- Margin of error (E) = 0.05

Using the formula:

$$n = \frac{(1.96)^2\ 0.5\ .(1-5)}{(0.05)^2}$$

Calculate Z^2

$(1.96)^2 = 3.8416$

Calculate p. (1-p):

0.5 . (1-0.5) = 0.22

Calculate E^2:

$(0.05)^2 = 0.0025$

$$n = \frac{3.8416 \cdot 0.25}{0.0025}$$

$$n = \frac{0.9604}{0.0025} = 384.16$$

Therefore, the sample size is approximately 384

3.5 Sampling Technique

A multistage sampling technique will be the most suitable for this study because it will allow the researcher to select respondents from large geographical areas (selected Local Government Areas) in a systematic and manageable way. Since the target population consists of women of reproductive age (18–40 years) spread across different communities and households, this method will ensure fair representation at each stage. In the first stage, selected Local Government Areas will be chosen. In the second stage, specific wards or communities within each LGA will be selected. In the final stage, eligible women will be chosen using simple random sampling or systematic sampling. This process will reduce cost, save time, and ensure that every woman in the target group has an equal chance of being included in the study. This technique will fit the study because it will enhance representativeness, minimize sampling bias, and allow the researcher to generalize the findings to the entire population of women of reproductive age in the selected Local Government Areas.

3.6 Instrument for Data Collection

The instrument that will be used for data collection in this study was a structured self-administered questionnaire alongside anthropometric measurement (BMI calculation) to assess the obesity status of the respondents. The questionnaire was divided into three (3) sections:

Section A: Socio-demographic Data

This section captured information on the respondents' background such as age, marital status, educational level, occupation, and religion.

Section B: Knowledge and Prevention of Obesity

This section assessed the respondents' knowledge of obesity, its causes, risk factors, symptoms, complications.

Section C: Prevention practices of Obesity

This section assessed the respondent's Preventive measures on obesity such as Healthy eating habits, physical activity and lifestyle modifications.

Section D: Factors Influencing Obesity Prevention

This section examined the factors that may affect the prevention of obesity among the respondents, such as cultural beliefs, financial status, access to health information, and personal attitudes.

This provided an objective measure of the obesity status of the respondents and was used to complement the information obtained from the questionnaire.

3.7. Validity of the Instrument

Validity is defined as the extent to which an instrument measures what it is supposed to measure and perform as it is designed to perform. To ensure the research instrument's accuracy and effectiveness, its validity was thoroughly verified.The validity of the research instrument was ascertained by both a public health nurse and a statistician to ensure face and content validity.Based on their feedback, necessary adjustments were made to refine the instrument,

ensuring that it was robust and reliable. This rigorous validation process was essential to establish the instrument's credibility and ensure that it yielded meaningful and relevant data when administered to the respondents. By verifying the instrument's validity, the researcher could confidently rely on the data collected to inform the study's findings and conclusions.

3.8 Reliability of the Instrument

Reliability refers to the consistency and stability of the instrument in producing similar results when administered repeatedly under similar conditions. A pre-test (pilot Testing) will be conducted with 10% women from a similar community in Benin City, but not part of the main study. The pre-test aimed to assess the questions' clarity, understanding, and consistency. Respondents provided feedback on their comprehension of the questions and ease of answering. Based on the feedback, some questions were rephrased for clarity, and adjustments were made to the completion time. The instrument's reliability will be confirmed using Cronbach's Alpha test, which will show a value above 0.70, indicating acceptable reliability. This process ensured that the instrument produced consistent results and was ready for use in the main study.

3.9 Method of Data Collection

Data for this study will be collected through the administration of structured self-administered questionnaires to selected respondents. Prior to data collection, ethical approval and written consent were obtained from the Local Government Chairman after explaining the purpose of the study. Informed consent was also obtained from the participants, who were assured of anonymity and voluntary participation. The questionnaires were distributed during their spare time to avoid disrupting their daily activities, and respondents were given ample time to complete them. Completed questionnaires were collected immediately. The process lasted approximately two weeks.

3.10 Method of Data Analysis

The collected data will be analyzed using a combination of descriptive and inferential statistical methods. The analysis process involved several steps:

Data Preparation

The data will be reviewed for completeness and consistency, and any incomplete or unclear responses were excluded. The data were then coded and entered into statistical software.

Descriptive Statistics

Descriptive statistics will be used to summarize the data, including frequencies, percentages, means, and standard deviations. Visual representations such as bar and pie charts were used to illustrate the distribution of respondents' knowledge and BMI categories.

Inferential Statistics

Inferential statistics will be used to examine relationships between variables. This included chi-square tests to examine associations between socio-demographic factors and knowledge or practices related to obesity prevention, t-tests/ANOVA to compare mean knowledge scores across demographic groups, and correlation analysis to determine the relationship between BMI and knowledge or practices

BMI Analysis

BMI data will be classified according to WHO guidelines, and descriptive statistics were used to calculate the percentage of respondents in each category.

Statistical Software

All data analyses will be performed using SPSS or Excel, with statistical significance set at $p<0.05$.

CHAPTER FOUR

RESULTS

This chapter deals with the representation of data collected regarding the knowledge and prevention of obesity among women of reproductive age (18-40 years) in selected local governments. A total of 382 questionnaires were distributed to women of reproductive age (18-40 years) who trade and/or reside within Uselu Market and its surrounding community, 371 were properly filled and valid for data analysis, giving a response rate of 97.1%.

Table 4.1: Socio-demographic characteristics of respondents

Variable	Frequency (n = 371)	Percent (%)
Age		
18–25	89	24.0
26–30	113	30.5
31–35	97	26.1
36–40	72	19.4
Educational Level		
No formal education	27	7.3
Primary education	61	16.4
Secondary education	139	37.5
Tertiary education	144	38.8
Religion		
Christianity	279	75.2
Islam	71	19.1
Traditional	21	5.7
Marital Status		
Single	93	25.1
Married	227	61.2
Divorced	34	9.2
Widowed	17	4.6
Do You Have Children?		
Yes	289	77.9
No	82	22.1

Table 4.1 presents the socio-demographic characteristics of the respondents. The majority of participants were between the ages of 26 and 30 (30.5%), followed by those aged 31–35 (26.1%) and 18–25 (24.0%), while the smallest proportion was aged 36–40 (19.4%). In terms of education, most respondents had tertiary education (38.8%) or secondary education (37.5%), whereas a smaller number had primary education (16.4%) or no formal education (7.3%). Regarding religion, a significant majority were Christians (75.2%), followed by Muslims (19.1%), and a small fraction practiced traditional religion (5.7%). Marital status data showed that most respondents were married (61.2%), while 25.1% were single, 9.2% divorced, and 4.6% widowed. Finally, a large proportion of respondents had children (77.9%), with 22.1% reporting they did not have any.

Answering Research Questions

Research Question 1: What is the level of knowledge regarding obesity and its health implications among women of reproductive age (18-40 years) in selected local governments?

Table 4.2: Knowledge regarding obesity and its health implications

Item and Options	Frequency (%)	Correct (%)	Wrong (%)	Mean	Remark
What is the BMI range considered as obese?					
18.5 – 24.9	134(36)	119(32)	252(68)	1.3	Poor
25.0 – 29.9	118(32)				
30.0 and above	119(32)				
Which is a common health risk associated with obesity?					
Asthma	105(28)	147(40)	224(60)	1.4	Poor
Type 2 Diabetes	147(40)				
Malaria	119(32)				
Major cause of obesity?					
Excessive physical activity	89(24)	171(46)	200(54)	1.5	Good
High-calorie foods with little physical activity	171(46)				
Drinking water frequently	111(30)				
What best defines obesity?					
Underweight due to lack of nutrients	91(25)	179(48)	192(52)	1.5	Good
Temporary weight gain after eating	101(27)				
Excessive fat accumulation that impairs health	179(48)				
Main method to assess obesity?					
Measuring chest size	108(29)	153(41)	218(59)	1.4	Poor
Calculating BMI	153(41)				
Checking blood group	110(30)				

Organ most affected by obesity-related complications?					
Heart	154(41)	154(41)	217(59)	1.4	Poor
Stomach	128(35)				
Ear	89(24)				
Which statement is true about obesity?					
Obesity only affects older people	96(26)	163(44)	208(56)	1.4	Poor
Obesity can lead to increased risk of hypertension	163(44)				
Obesity is not influenced by lifestyle choices	112(30)				
Lifestyle factor contributing most to obesity?					
Drinking herbal tea	85(23)	195(53)	176(47)	1.5	Good
Sedentary behavior with poor diet	195(53)				
Reading books regularly	91(25)				
Early warning sign of obesity includes:					
Rapid hair loss	89(24)	160(43)	211(57)	1.4	Poor
Skin rashes	122(33)				
Sustained and significant weight gain	160(43)				
A healthy way to prevent obesity includes:					
Eating late at night	98(26)	159(43)	212(57)	1.4	Poor
Skipping breakfast	114(31)				
Engaging in regular physical exercise	159(43)				
		Grand Mean		**1.4**	**Poor**

Mean Cut-off = 1.5

Table 4.2 shows that the highest mean score of 1.5 was recorded for knowledge on the major cause of obesity, the best definition of obesity, and the lifestyle factor contributing most to

obesity, indicating a good level of knowledge in these areas. This was followed by questions on the BMI range considered as obese, health risks associated with obesity, the main method to assess obesity, the organ most affected by obesity-related complications, true statements about obesity, early warning signs of obesity, and healthy ways to prevent obesity, each with a mean score of 1.4, reflecting poor knowledge. The grand mean score was 1.4, suggesting an overall poor level of knowledge regarding obesity and its health implications among respondents.

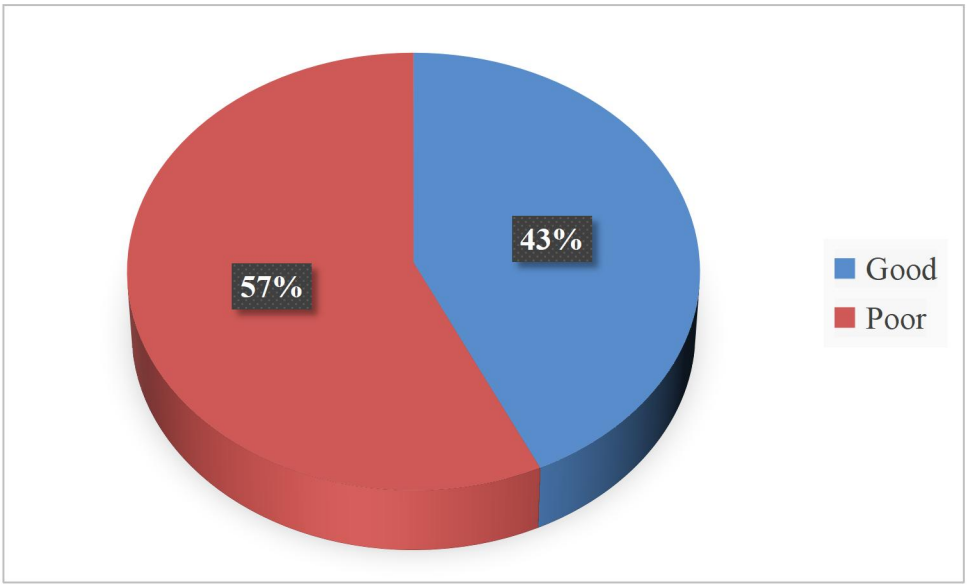

Figure 4.1: Pie chart showing knowledge regarding obesity and its health implications

Figure 4.1 shows that 160 respondents (43%) had good knowledge regarding obesity and its health implications, while 211 respondents (57%) had poor knowledge.

Research Question 2: what is the extent of preventive measures against obesity among women of reproductive age in the selected local governments.

Table 4.3: Extent of preventive measures against obesity

Statement	Always	Sometimes	Rarely	Never	Mean	Remark
I engage in physical exercise (e.g., walking, jogging, aerobics).	89(24)	117(32)	103(28)	62(17)	2.6	High
I choose fruits and vegetables as part of my daily meals.	106(29)	121(33)	82(22)	62(17)	2.7	High
I avoid eating high-calorie or fast foods.	73(20)	61(16)	108(29)	129(35)	2.2	Low
I monitor my body weight or check my BMI regularly.	52(14)	113(30)	126(34)	80(22)	2.4	Low
I reduce sugary drinks or soft drinks in my diet.	95(26)	107(29)	102(27)	67(18)	2.6	High
I eat late at night (after 9 PM).	108(29)	96(26)	87(23)	80(22)	2.6	High
I skip breakfast.	99(27)	91(25)	94(25)	87(23)	2.5	High
I follow a balanced diet recommended by health professionals.	86(23)	74(20)	93(25)	118(32)	2.3	Low
I read food labels to check for fat and sugar content.	64(17)	134(36)	109(29)	64(17)	2.5	High
I plan my meals ahead to ensure healthy eating habits.	91(25)	122(33)	89(24)	69(19)	2.6	High
			Grand Mean		**2.5**	**High**

Mean Cut-off = 2.5

Table 4.3 shows that the highest mean score of 2.7 was recorded for choosing fruits and vegetables as part of daily meals, indicating high engagement in this preventive measure. This was followed by a mean score of 2.6 for engaging in physical exercise, reducing sugary drinks or soft drinks, eating late at night, skipping breakfast, reading food labels to check for fat and sugar content, and planning meals ahead to ensure healthy eating habits, all of which also reflect high levels of preventive measures. A mean score of 2.4 was observed for monitoring body weight or checking BMI regularly, which is categorized as a low level of preventive action. The lowest

mean score of 2.2 was for avoiding high-calorie or fast foods, indicating a relatively lower adherence to this preventive measure. The grand mean was 2.5, suggesting an overall high level of engagement in preventive measures against obesity.

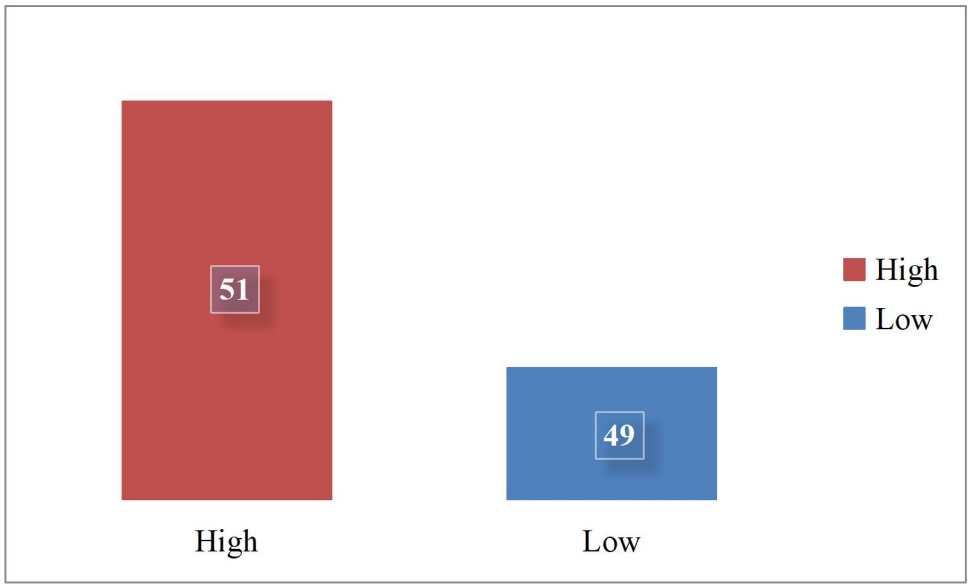

Figure 4.2: Bar chart showing extent of preventive measures against obesity

Figure 4.2 shows that 190 respondents (51%) reported a high extent of preventive measures against obesity, while 181 respondents (49%) reported a low extent.

Research Question 3: What factors influence the preventive practices related to obesity among women of reproductive age (18-40 years) in the selected local governments?

Table 4.4: Factors influencing obesity prevention practices

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Remark
I believe my level of education influences how I manage my weight.	83(22)	126(34)	97(26)	65(18)	2.6	Influential
I find it difficult to practice healthy eating due to financial constraints.	102(28)	114(31)	89(24)	66(18)	2.7	Influential
Cultural beliefs influence my food choices and eating habits.	78(21)	131(35)	94(25)	68(18)	2.6	Influential
I lack access to fitness centers or safe spaces for physical activity.	95(26)	119(32)	91(25)	66(18)	2.7	Influential
I am motivated to maintain a healthy weight when I receive support from family or friends.	111(30)	132(36)	74(20)	54(15)	2.8	Influential
Media and advertisements influence the types of food I consume.	84(23)	129(35)	92(25)	66(18)	2.6	Influential
I avoid preventive practices because I do not consider obesity a serious health concern.	45(12)	96(26)	128(35)	102(27)	2.2	Influential
My work or daily schedule makes it difficult for me to exercise regularly.	91(25)	122(33)	98(26)	60(16)	2.7	Influential
I have enough knowledge to take preventive measures against obesity.	97(26)	134(36)	77(21)	63(17)	2.7	Influential
Healthcare professionals have played a role in influencing my lifestyle choices regarding weight.	106(29)	127(34)	79(21)	59(16)	2.8	Influential
			Grand Mean		**2.6**	**Influential**

Mean Cut-off = 2.5

Table 4.4 shows that the highest mean score of 2.8 was recorded for being motivated by support from family or friends and for the influence of healthcare professionals on lifestyle choices, indicating strong influence on obesity prevention practices. This was followed by a mean score of 2.7 for financial constraints, lack of access to fitness centers or safe spaces, demanding schedules, and having enough knowledge to take preventive measures, all of which were influential. A mean of 2.6 was observed for the influence of education level, cultural beliefs, and media or advertisements, also indicating influence. The lowest mean score of 2.2 was recorded for avoiding preventive practices due to not considering obesity a serious health concern. The grand mean was 2.6, indicating an overall influential level of factors affecting obesity prevention practices.

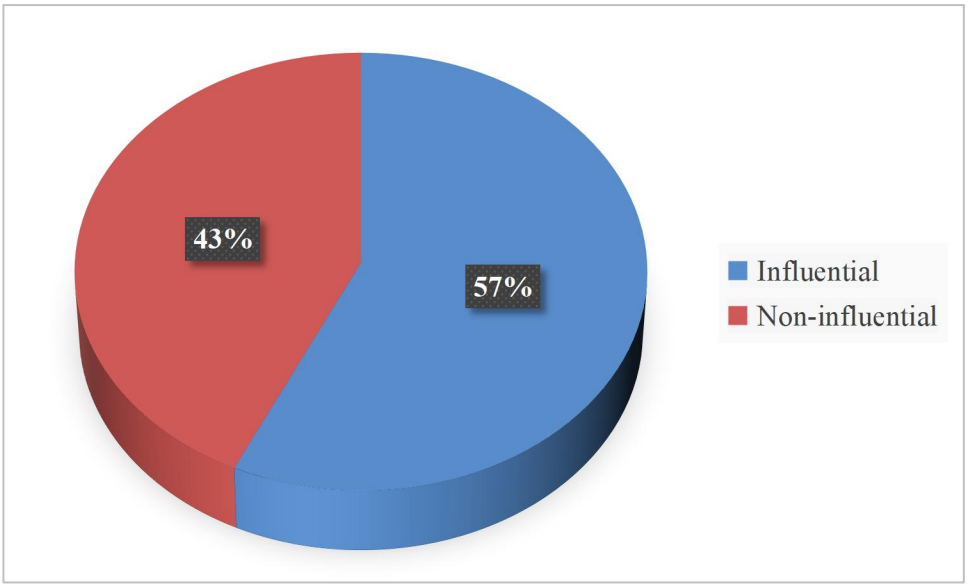

Figure 4.3: Pie chart showing factors influencing obesity prevention practices

Figure 4.3 shows that 212 respondents (57%) identified the factors influencing obesity prevention practices as influential, while 159 respondents (43%) considered them non-influential.

Hypothesis Testing

There is no significant relationship between the level of knowledge regarding obesity and extent of preventive measures against obesity among women of reproductive age in the selected local governments.

Table 4.5: Relationship between the level of knowledge regarding obesity and extent of preventive measures against obesity among women of reproductive age in the selected local governments

Preventive Measure	Knowledge		Test Statistics (χ^2)	df	P value	Decision
	High	**Low**				
High	160(43.1)	211(56.9)	4.8673	1	0.03	Rejected
Low	190(51.2)	181(48.8)				

Table 4.5 shows a significant relationship between the level of knowledge regarding obesity and the extent of preventive measures against obesity among women of reproductive age in the selected local governments. The Chi-square test statistic (χ^2) was 4.8673 with 1 degree of freedom, and a p-value of 0.03, which is less than the 0.05 significance level. This leads to the rejection of the null hypothesis, indicating that the level of knowledge regarding obesity significantly influences the extent of preventive measures taken.

CHAPTER FIVE

DISCUSSION AND FINDINGS

This chapter discusses the major findings of the research compared with the literature reviewed, the implication for nursing, summary, conclusion, Recommendations and Suggestions for further Studies.

5.1. Discussion of major Findings

The study assessed the knowledge and prevention of obesity among women of reproductive age (18-40 years) in selected local governments. The socio-demographic characteristics of the study participants reveal important patterns that can be contextualized with previous research findings. The age distribution shows a predominance of young to middle-aged women of reproductive age, with the majority (56.6%) between 26-35 years. This age profile is comparable to Olanrewaju et al.'s (2021) Nigerian study, which focused on women aged 19-35 years, allowing for meaningful comparisons of obesity knowledge and prevention practices across similar age groups. Educational attainment among respondents was relatively high, with 76.3% having at least secondary education and 38.8% reaching tertiary level. This is particularly relevant when compared to Wang et al.'s (2020) global study, which found significant correlations between educational level and obesity prevention knowledge. However, the presence of 7.3% with no formal education and 16.4% with only primary education suggests potential vulnerability to limited health literacy, similar to concerns raised in Aluko and Adeyemi's (2021) Nigerian study. Religious distribution showed a predominance of Christianity (75.2%), followed by Islam (19.1%) and traditional beliefs (5.7%). This religious composition might influence cultural perspectives on body image and health practices, as highlighted in Aluko and Adeyemi's research on cultural influences on obesity prevention in Nigerian communities. Marital status data revealed that most respondents (61.2%) were married, with significant proportions being

single (25.1%), divorced (9.2%), or widowed (4.6%). This marital pattern, combined with the high percentage of respondents with children (77.9%), aligns with the demographic profile in Mkhize and Nkosi's (2020) South African study of maternal obesity prevention practices. The high proportion of mothers in the study (77.9%) is particularly relevant when considering findings from Agwara et al.'s (2023) Cameroonian study on maternal obesity and excessive gestational weight gain. This suggests that many respondents have experienced pregnancy and related weight management challenges, potentially influencing their knowledge and practices regarding obesity prevention. These demographic characteristics provide important context for understanding the study's findings on obesity knowledge and prevention practices, particularly when compared to similar populations in previous research. The relatively high educational levels suggest potential for good health literacy, yet other factors such as cultural and religious influences may moderate the translation of knowledge into practice.

Level of knowledge regarding obesity and its health implications among women of reproductive age

The findings regarding knowledge of obesity and its health implications show some interesting contrasts with previous studies. While 43% of respondents demonstrated good knowledge, the majority (57%) showed poor knowledge, which somewhat aligns with findings from Olanrewaju et al. (2021) in Nigeria, though with some key differences. The study revealed particularly concerning gaps in basic obesity knowledge, with only 32% correctly identifying the BMI range for obesity (≥30.0). This is notably lower than the awareness levels found in Herring et al.'s (2013) U.S. study, suggesting a more significant knowledge deficit in the present population. Regarding health risks, 40% correctly identified Type 2 Diabetes as a common obesity-related condition. This finding contrasts with Herring et al.'s study, which found higher awareness of

cardiometabolic complications. However, it aligns more closely with Agwara et al.'s (2023) Cameroonian study, where knowledge of obesity complications was similarly limited. Understanding of obesity's fundamental aspects showed mixed results: 46% correctly identified high-calorie foods combined with little physical activity as a major cause, and 48% accurately defined obesity as excessive fat accumulation impairing health. This represents a lower level of basic understanding compared to Olanrewaju et al.'s findings, where 62% demonstrated high knowledge of obesity risk factors. The assessment method knowledge was poor, with only 41% correctly identifying BMI calculation as the main method. This aligns with Omoregie and Osagie's (2022) findings in Edo State, where only 32% correctly understood BMI classifications. Prevention knowledge was particularly concerning, with only 43% identifying regular physical exercise as a healthy preventive measure. This is significantly lower than the WHO's 2021 global study, which found that in middle-income countries, 45% of women practiced some form of obesity prevention, while in high-income countries, the figure reached 65%. These findings suggest a more severe knowledge deficit than previously documented in comparable populations, indicating a pressing need for enhanced education and awareness programs.

Extent of preventive measures against obesity among women of reproductive age

The findings from the present study regarding factors influencing obesity prevention practices can be compared with previous research findings to provide valuable insights. Overall, 51% of respondents reported practicing high-level preventive measures against obesity, while 49% reported low-level prevention practices. This fairly even split highlights a significant opportunity for improvement in prevention behaviors. The study reveals that physical activity and dietary choices are key areas where prevention practices vary considerably. About 56% of respondents reported engaging in physical exercise either 'always' or 'sometimes', which aligns with findings

from Adebayo et al.'s (2022) Nigerian study showing 42% exercise engagement. However, this represents a markedly higher rate than Omoregbe et al.'s (2023) findings in Edo State, where only 25% maintained regular exercise routines. Regarding dietary practices, 62% of respondents reported regular consumption of fruits and vegetables, comparable to Adebayo et al.'s finding where 58% of urban Nigerian women made conscious efforts to eat healthily. However, only 36% consistently avoided high-calorie or fast foods, falling significantly short of Lopez et al.'s (2021) Brazilian intervention study where 70% of participants in the intervention group successfully adopted healthier dietary habits. Weight monitoring and professional dietary guidance showed concerning trends, with only 44% regularly monitoring their weight or BMI, and 43% consistently following professionally recommended balanced diets. These figures are notably lower than those reported in the WHO's 2021 global study for middle-income countries. The study also revealed problematic meal timing behaviors, with 55% regularly eating late at night and 52% habitually skipping breakfast. These practices contrast with findings from Mkhize and Nkosi's (2020) South African study, where 30% of participants followed recommended dietary guidelines. More positively, 55% of respondents reported regularly reducing sugary drink consumption, and awareness behaviors showed moderate adoption, with 53% regularly reading food labels and 58% planning meals ahead. However, these figures still indicate room for improvement compared to successful intervention programs like those documented in Lopez et al.'s Brazilian study. The findings suggest that while prevention practices are better than some previous local studies (such as Omoregbe et al.'s 30% active practice rate), they fall short of outcomes achieved in structured intervention programs. This indicates a clear need for more organized and comprehensive obesity prevention initiatives, particularly those that have demonstrated success in similar contexts.

Factors Influencing The Preventive Practices Related To Obesity Among Women Of Reproductive Age

The study's findings on factors influencing obesity prevention practices reveal significant parallels and contrasts with previous research. Overall, 57% of respondents identified these factors as influential, while 43% considered them non-influential, providing important insights into barriers and facilitators of obesity prevention. Educational influence on weight management was acknowledged by 56% of respondents, aligning with Wang et al.'s (2020) global study, which demonstrated that women with higher education levels possessed greater knowledge of obesity risks and prevention strategies. This finding reinforces the educational disparity pattern observed across high-income and low-income countries, where 78% versus 45% of participants correctly identified obesity risk factors, respectively. Financial constraints emerged as a significant barrier, with 59% reporting difficulty maintaining healthy eating habits due to cost considerations. This mirrors findings from both Wang et al.'s study and Adebayo et al.'s (2022) Nigerian research, where economic factors significantly impacted access to nutritious food options, particularly in rural areas. Cultural influences on food choices were reported by 56% of respondents, comparable to Aluko and Adeyemi's (2021) findings in Nigeria, where cultural perceptions of body size significantly influenced health behaviors. Their study found that over 60% of participants associated weight gain with prosperity, creating barriers to obesity prevention. Infrastructure and accessibility issues were prominent, with 58% reporting limited access to fitness facilities or safe exercise spaces. This aligns with Okafor et al.'s (2019) regional study, which emphasized how healthcare accessibility impacts prevention practices. Social support emerged as a crucial factor, with 66% acknowledging the positive influence of family

and friend support on weight management efforts. Media influence was reported by 58% of respondents, while work-schedule constraints affected 58% of participants. These findings relate to Johnson et al.'s (2020) study on digital health campaigns, which demonstrated the significant impact of media on health behaviors and the need to address practical barriers to implementation. Healthcare professional influence was notably strong, with 63% acknowledging their role in shaping lifestyle choices. This corresponds with Okafor et al.'s findings, where regular healthcare access correlated with improved prevention practices (72% versus 38% for those with limited access). Knowledge adequacy for prevention was reported by 62% of respondents, though this contrasts with actual prevention practices, similar to the pattern observed in Omoregie and Osagie's (2022) study, where knowledge did not necessarily translate to practice. Notably, 38% did not consider obesity a serious health concern, indicating a persistent awareness gap similar to that found in Agwara et al.'s (2023) Cameroonian study, where understanding of obesity complications remained limited despite moderate knowledge of weight management methods. These findings suggest that while individual factors show varying degrees of influence, the interplay of socioeconomic, cultural, and structural factors creates a complex environment for obesity prevention, consistent with patterns observed in previous research across similar populations.

5.2 Implication to nurses

The findings of this study carry several important implications for nursing practice, particularly in the area of obesity prevention and health promotion among women of reproductive age. As frontline healthcare providers, nurses play a crucial role in educating patients, promoting healthy lifestyles, and advocating for preventive health behaviors. The study revealed that while a moderate proportion of respondents possessed knowledge about obesity and its health risks, there

remained significant gaps in basic understanding—especially concerning BMI classification, risk factors, and preventive strategies.

This knowledge deficit underscores the need for nurses to intensify their health education efforts. Nurses must be adequately equipped with current, evidence-based information about obesity and be proactive in sharing this knowledge during routine patient interactions, especially with women in their reproductive years who are at higher risk for obesity-related complications. Given the correlation between educational attainment and health literacy, nurses must adapt their communication approaches to suit individuals with varying levels of understanding and ensure that health messages are accessible, culturally sensitive, and practical.

Moreover, the study highlighted several barriers to obesity prevention, including financial constraints, cultural beliefs, poor access to healthy food and fitness facilities, and inconsistent support systems. These factors emphasize the importance of holistic nursing care that goes beyond clinical advice to consider the social, economic, and cultural realities of patients. Nurses must be prepared to identify and address these challenges through patient counseling, community outreach, and interprofessional collaboration with dietitians, social workers, and public health professionals.

The strong influence of healthcare professionals on patients' lifestyle choices, as reported in the study, reinforces the critical position of nurses in initiating behavior change. As trusted figures, nurses must serve not only as caregivers but also as role models, motivators, and change agents within their communities. Regular in-service training, workshops, and professional development opportunities should be provided to ensure nurses remain informed about emerging trends and effective interventions in obesity prevention.

5.3 Summary

This study explored the knowledge, perception, and barriers to obesity prevention among women of reproductive age. The findings revealed that while a considerable number of respondents demonstrated moderate awareness of obesity and its associated health risks, there were notable gaps in specific areas such as BMI classification, dietary practices, and effective preventive strategies. Many women held misconceptions about obesity, and a significant portion did not perceive themselves to be at risk, despite evidence to the contrary.

The study also identified several barriers that hinder effective obesity prevention, including financial constraints, cultural influences, lack of access to health-promoting resources, and insufficient support from family and healthcare providers. These challenges reflect the multifaceted nature of obesity and highlight the need for comprehensive, community-based interventions that address both knowledge and structural limitations.

5.4 Conclusion

The findings of this study provide valuable insights into the knowledge, preventive practices, and influencing factors surrounding obesity among women of reproductive age. Despite a moderate level of awareness, the study revealed significant gaps in understanding the health risks of obesity, the correct use of assessment tools like BMI, and consistent engagement in preventive behaviors such as healthy dieting and physical activity.

It is evident that obesity prevention in this population is influenced by a complex interplay of socio-demographic, cultural, economic, and environmental factors. Many women face barriers

such as financial limitations, cultural norms, lack of time, and limited access to fitness facilities, all of which hinder their ability to adopt and sustain healthy lifestyles.

Crucially, the role of healthcare professionals—particularly nurses—is central to improving obesity prevention efforts. Nurses serve as trusted sources of health information and are well-positioned to educate, counsel, and support women in adopting healthier habits.

5.5 Limitations of study

While this study provides meaningful insights into the knowledge, practices, and influencing factors related to obesity prevention among women of reproductive age, several limitations should be acknowledged. Firstly, the study was conducted in a single tertiary healthcare institution, which may limit the generalizability of the findings to other settings, particularly rural or less urbanized areas where access to health information and services may differ significantly.

Secondly, the use of a self-administered questionnaire introduces the possibility of response bias, as participants may have provided socially desirable answers rather than reflecting their true knowledge or behaviors. Additionally, the cross-sectional design of the study captures only a snapshot in time and does not allow for the assessment of changes or causality between knowledge levels and preventive practices.

5.6 Recommendations:

Based on the findings of this study, several recommendations are proposed to enhance obesity prevention efforts among women of reproductive age, particularly within healthcare institutions like the University of Benin Teaching Hospital.

- There is a need for targeted health education programs aimed at improving knowledge about obesity, its health implications, and effective prevention strategies. These programs should be tailored to different educational levels and utilize culturally sensitive materials to ensure wide understanding and acceptance.
- Healthcare professionals, particularly nurses, should be empowered through continuous professional development to effectively educate and counsel patients on healthy lifestyle practices. As frontline caregivers, nurses play a critical role in shaping patients' attitudes and behaviors towards weight management and general health.
- Hospital management and policymakers should invest in creating supportive environments that encourage physical activity and healthy eating. This may include the provision of fitness facilities, healthy meal options in workplace cafeterias, and regular wellness campaigns targeting both healthcare workers and patients.
- Community outreach initiatives should also be strengthened to reach women beyond the hospital setting. Collaborations with religious institutions, women's groups, and media platforms can be instrumental in disseminating accurate information and promoting healthy behaviors at the grassroots level.
- Future research should explore the psychological, economic, and sociocultural dimensions of obesity prevention to provide a more holistic understanding. Longitudinal studies are also recommended to assess how knowledge and behavior evolve over time and in response to specific interventions.

5.7 Suggestion for Further study

While this study has provided valuable insights into the knowledge, attitude, and preventive practices regarding obesity among women of reproductive age at the University of Benin Teaching Hospital, it also opens avenues for further research.

Future studies could expand the scope by including multiple healthcare facilities across different geographic regions to allow for broader generalization of findings. Comparative studies between urban and rural settings could also provide deeper understanding of contextual factors influencing obesity-related behaviors.

Moreover, longitudinal studies are recommended to assess how knowledge and attitudes change over time, especially following targeted interventions. Such studies can help evaluate the long-term effectiveness of health education and awareness campaigns on obesity prevention.

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APPENDIX I

DEPARTMENT OF NURSING SCIENCES

Dear Respondent,

I am a student of the above-named institution conducting a study on the topic **‘’ASSESSMENT OF THE KNOWLEDGE AND PREVENTION OF OBESITY AMONGST WOMEN OF REPRODUCTIVE AGE (18-40 YEARS) IN EGOR LOCAL GOVERNMENT AREA BENIN CITY’’.** This questionnaire contains five sections; the first is a demographic profile for a questionnaire on the topic, followed by four sections that are structured towards finding answers to the specified research topic. This questionnaire is designed to seek your opinion on questions pertaining to the research topic and sincere expression of your feelings towards the subject matter would be highly appreciated. Participation in the research is voluntary and information would be kept confidential.

Thank you for your willingness to participate.

_____

Researcher Signature

OGBEKHIULU EBOSETALE TREASURE

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Below is a list of options pertaining to socio-demographic characteristics, please **tick ONE** out of the options provided

Demographic data

1. Age: 18-25 ( ), 26 -30 ( ), 31-35( ), 36- 40( ).
2. Educational level: No formal education ( ), Primary education ( ), Secondary education ( ), Tertiary education ( )
3. Religion: Christianity ( ), Islam ( ), Traditional ( )
4. Marital Status: single ( ), Married ( ), Divorced ( ), Widowed ( )
5. Do you have children? Yes ( ), No ( )

Occupation: Traders ( ), Civil Servants ( ), Others ( ).

Section B: knowledge regarding obesity and its health implications

1. What is the Body Mass Index (BMI) range considered as obese? A. 18.5 – 24.9 ( ) B. 25.0 – 29.9 ( ) C. 30.0 and above ( )

2. Which of the following is a common health risk associated with obesity? A. Asthma ( ) B. Type 2 Diabetes C. Malaria

3. Which of the following is a major cause of obesity? A. Excessive physical activity B. Consumption of high-calorie foods with little physical activity C. Drinking water frequently

4. Which of the following best defines obesity? A. A condition of being underweight due to lack of nutrients ( ) B. A temporary increase in body weight after eating ( ) C. An abnormal or excessive fat accumulation that may impair health ( )

5. What is the main method used to assess if someone is obese? A. Measuring chest size ( ) B. Calculating Body Mass Index (BMI) ( ) C. Checking blood group ( )

6. Which organ is most affected by obesity-related complications? A. Heart ( ) B. ( ) Stomach ( ) C. Ear ( )

7. Which of the following statements is true about obesity? A. Obesity only affects older people ( ) B. Obesity can lead to increased risk of hypertension ( ) C. Obesity is not influenced by lifestyle choices ( )

8. Which lifestyle factor contributes most to obesity? A. Drinking herbal tea ( ) B. Sedentary behavior with poor diet ( ) C. Reading books regularly ( )

9. One of the early warning signs of obesity includes: A. Rapid hair loss ( ) B. Skin rashes C. Significant and sustained weight gain

10. A healthy way to prevent obesity includes: A. Eating late at night B. Skipping breakfast C. Engaging in regular physical exercise

Section C: the extent of preventive measures against obesity among women of reproductive age

S/N	Statement	Always	Often	Sometimes	Rarely	Never
1	I engage in physical exercise (e.g., walking, jogging, aerobics).					
2	I choose fruits and vegetables as part of my daily meals.					
3	I avoid eating high-calorie or fast foods.					
4	I monitor my body weight or check my BMI regularly.					
5	I reduce sugary drinks or soft drinks in my diet.					
6	I eat late at night (after 9 PM). *(reverse-scored)*					
7	I skip breakfast. *(reverse-scored)*					
8	I follow a balanced diet recommended by health professionals.					
9	I read food labels to check for fat and sugar content.					
10	I plan my meals ahead to ensure healthy eating habits.					

SS/N	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I believe my level of education influences how I manage my weight.					

2	I find it difficult to practice healthy eating due to financial constraints.					
3	Cultural beliefs influence my food choices and eating habits.					
4	I lack access to fitness centers or safe spaces for physical activity in my community.					
5	I am motivated to maintain a healthy weight when I receive support from family or friends.					
6	Media and advertisements influence the types of food I consume.					
7	I avoid preventive practices because I do not consider obesity a serious health concern.					
8	My work or daily schedule makes it difficult for me to exercise regularly.					
9	I have enough knowledge to take preventive measures against obesity.					
10	Healthcare professionals have played a role in influencing my lifestyle choices regarding weight.					

Section D: Factors Influencing Obesity Prevention Practices

RELIABILITY OF INSTRUMENT

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.71	0.70	30

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
What is the Body Mass Index (BMI) range considered as obese?	53.4931	15.077	-.047	.701
Which of the following is a common health risk associated with obesity?	54.1111	15.302	.204	.210
Which of the following is a major cause of obesity?	53.4167	15.126	-.061	.185
Which of the following best defines obesity?	87.3188	27.590	-.123	.099
What is the main method used to assess if someone is obese?	87.4813	26.138	.053	.092
Which organ is most affected by obesity-related complications?	53.4931	15.077	-.047	.565
Which of the following statements is true about obesity?	53.2986	14.141	.055	.196
Which lifestyle factor contributes most to obesity?	53.4931	15.077	-.047	.565
One of the early warning signs of obesity includes:	87.3188	27.590	-.123	.099
A healthy way to prevent obesity includes:	87.4813	26.138	.053	.092
I engage in physical exercise (e.g., walking, jogging, aerobics).	53.4931	15.077	-.047	.165
I choose fruits and vegetables as part of my daily meals.	87.2313	27.034	-.044	.078
I avoid eating high-calorie or fast foods.	87.3188	27.590	-.123	.099
I monitor my body weight or check my BMI regularly.	87.3188	27.590	-.123	.099
I reduce sugary drinks or soft drinks in my diet.	87.4813	26.138	.053	.092
I eat late at night (after 9 PM). *(reverse-scored)*	53.4931	15.077	-.047	.165
I skip breakfast. *(reverse-scored)*	87.4500	25.582	.125	.071
I follow a balanced diet recommended by health professionals.	87.3188	27.590	-.123	.099
I read food labels to check for fat and sugar content.	87.4813	26.138	.053	.092
I plan my meals ahead to ensure healthy eating habits.	87.3188	27.590	-.123	.099
I believe my level of education influences how I manage my weight.	87.4813	26.138	.053	.092
I find it difficult to practice healthy eating due to financial constraints.	53.4931	15.077	-.047	.565
Cultural beliefs influence my food choices and eating habits.	87.3188	27.590	-.123	.099
I lack access to fitness centers or safe spaces for physical activity in my community.	87.4813	26.138	.053	.092
I am motivated to maintain a healthy weight when I receive support from family or friends.	53.4931	15.077	-.047	.565
Media and advertisements influence the types of food I consume.	87.6438	27.325	-.076	.081

I avoid preventive practices because I do not consider obesity a serious health concern.	87.5938	26.658	.058	.077
My work or daily schedule makes it difficult for me to exercise regularly.	87.3188	27.590	-.123	.099
I have enough knowledge to take preventive measures against obesity.	87.4813	26.138	.053	.092
Healthcare professionals have played a role in influencing my lifestyle choices regarding weight.	86.2813	26.719	-.064	.095

Comment: The reliability analysis using Cronbach's Alpha, yielding a result of 0.71, for the overall scale. Additionally, the Cronbach's Alpha of 0.52 when the items are standardized. These values suggest a good level of internal consistency among the items in this scale.